The Soybean Digest

Illinois State Armory, 1930 Chicago Headquarters. (See page 15)

Official Publication

AMERICAN SOYBEAN ASSOCIATION

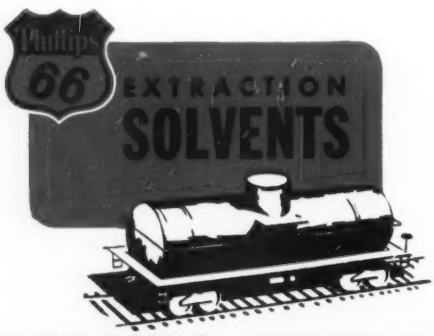
VOLUME 10 • NUMBER 8 JUNE • 1950

Jet Propelled Delivery!

● Our traffic people still insist that it is impossible to make solvent deliveries the day before the order is placed. Nevertheless, when you need solvents in a hurry, or just on regular schedule, you can depend on Phillips to handle your orders with jet propelled promptness.

As for quality . . . Phillips *66* Solvents are noted for their rigid specifications. For example, Phillips Hexane must meet a boiling range "spec" of 150 to 156 F and, in most instances, it only has a spread of *five* degrees. This means no light ends for you to waste, no heavy residue left in your meal, and year-round solvent uniformity in your solvent system. Of course, Phillips *66* Extraction Solvents are always water-white and free from contaminating odors and tastes.

Tell us your solvent requirements and let us send you complete information about Phillips *66* Successful Solvents for soybean, cottonseed, flaxseed, tung nut, rice bran, corn germ, castor bean, alfalfa, animal fat and other extraction industries.



PHILLIPS PETROLEUM COMPANY

CHEMICAL PRODUCTS DIVISION, BARTLESVILLE, OKLAHOMA

THE *Soybean Digest*

REG. U. S. PAT. OFF.

HUDSON, IOWA

Business, publication and circulation offices, Hudson, Iowa. Editor, Geo. M. Strayer. Managing Editor, Kent Pellett. Business Manager, Geo. McCulley. Director of Circulation, Gene Taylor.

Advertising representatives: Ewing Hutchison Co., 35 E. Wacker Drive, Chicago 1, Ill.

Vol. 10 — JUNE ☆ 1950 — No. 8

Published on the 10th of each month at Hudson, Iowa, by the American Soybean Association. Entered as second class matter November 20, 1940, at the postoffice at Hudson, Iowa, under the Act of March 3, 1879. Forms close on 25th of month preceding. Subscription price to association members, $2.50 per year; to non-members, $3.00 per year; Canada and other members of the Pan-American Union, $3.50; other foreign, $4.00.

IN THIS ISSUE

	page
Editor's Desk	4
Activities of Your Association	6
Growers	8
30th Convention in Heart of Bean Belt	15
Lime as a Hardening Agent in Paints — A. J. Lewis	17
Co-op Mill Meeting at Peoria	19
New Soy Flour Laboratory	19
Changes in World Soybean Production — Merna Irene Fletcher	20
Report from Germany — R. G. Brierley	22
June Crop Report	24
Publications	30
Grits and Flakes	34
Washington Digest — Porter M. Hedge	42
Market Street	43
In the Markets	45
Letters	50
Press	50

THE AMERICAN SOYBEAN ASSOCIATION

OFFICERS: President, John W. Evans, Montevideo, Minn.; Vice President, Jake Hartz, Jr. Stuttgart, Ark.; Secretary-Treasurer, Geo. M. Strayer, Hudson, Iowa.

DIRECTORS: Jake Hartz, Jr., Stuttgart, Ark.; C. G. Simcox, Assumption, Ill.; LeRoy Pike, Pontiac, Ill.; Ersel Walley, Fort Wayne, Ind.; Chester Biddle, Remington, Ind.; Geo. M. Strayer, Hudson, Iowa; Howard L. Roach, Plainfield, Iowa; John W. Evans, Montevideo, Minn.; Henry I. Cohn, Sr., St. Louis, Mo.; O. H. Acom, Wardell, Mo.; G. G. McIlroy, Irwin, Ohio; Calvin Hellman, Kenton, Ohio; John Dries, Saukville, Wis.; and R. H. Peck, River Canard, Ont.

FIELD SERVICE DIRECTOR: Paul C. Hughes, Hudson, Iowa.

Newly

Designed

Non-breakable

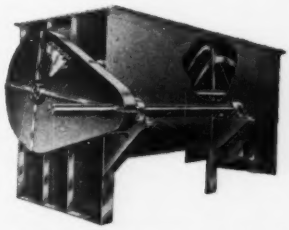
TROUGH ENDS

These trough ends are made of plate steel bodies with inter-changeable and detachable ball or babbitt flange bearings. These trough ends were designed for longer life, quicker, easier and more economical change-overs. On these units only the hub bearing wears out leaving the trough end unharmed. Therefore in your change overs the price of the hub bearings are only about one half the price of the old solid piece trough ends. Our counter shaft trough ends are of this same design. Shipments on both units can be made from stock. We manufacture a complete line of screw conveyors and accessories and shipments can also be made from stock.

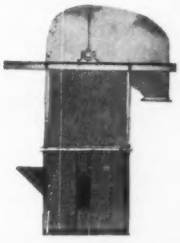
Heavy Duty

BATCH MIXERS

Built to last



Made of all steel, extra heavy duty welded construction. Capacities ranging from 1, 1½ and 2 ton and are made even larger to your individual specifications. Our engineers will be glad to assist you with your mixing problems. Batch mixers manufactured by Industrial are acclaimed by the mixed feed industry, chemical plants, oil and grease manufacturers, food mixers and many other industries throughout the nation as the best Batch mixer they've ever operated. Each and every mixer manufactured in our modern plant is given special care in its fabrication and assembly. This results in better mixtures and better performance.



BUCKET ELEVATORS

Built to your Specifications

All metal elevators complete with head, boot, legging and machinery made to your individual specifications. This is an all metal unit and insures longer wear and dust-tight performance. Head and boot is furnished with shaft mounted on ball or babbitt bearings. Boots come with large slide clean out doors. Furnished with cotton or rubberized belt and high speed cups.

INDUSTRIAL MACHINERY COMPANY

Incorporated

2300 South Main Street — Fort Worth 1, Texas

ENGINEERS MANUFACTURERS

of

Elevating *Conveying* *Hoisting* *Mixing*

Equipment

EDITOR'S DESK

COMMITTEE HAS DONE A GOOD JOB

The report of the trade and use promotion committee of the American Soybean Association, carried on page 6 in this issue, merits close scrutiny by every man in the soybean industry.

Up to this time there has been no need for sales work on soybean oil. It has sold itself. It needed no promotion. Much of the time buyers were, figuratively, waiting at the door. Acreage figures on 1950 crop soybeans would indicate that this situation may change shortly. In fact, the change started a year ago.

We need to know as much as possible about our products. We need to know their good points, their weaknesses. We need to know those fields in which research is needed, so that we may arrange for it or stimulate it. We need to know the fields of usage in which there are possibilities of expansion, and we need to have within the industry trained personnel which can be made available to prospective customers, assisting in the solving of problems of usage.

In other words, the soybean industry needs trained salesmen, trained technicians, men who can promote the sale of soybean products in general. And we need to assemble every possible bit of information pertaining to our products, cataloguing it carefully, making it available for product promotional use. By so doing we will be creating markets—high value markets—for the soybean grown on American farms. And we will be set to compete with those commodity groups which have established similar programs. Without such a program we are going to find ourselves outsold.

The report of the trade and use promotion committee is a commendable one. We need similar explorations into other fields. And we should recognize that committee for the job done to date—the first step in the right direction.

DON'T SHUT OFF PETROLEUM IMPORTS

The problems involved in maintaining or expanding our agricultural exports are coming into sharp focus now. We are going to have to face up to them before some of us had anticipated. ECA funds expire in 1952, are being cut back now. Financing after ECA is the problem paramount in the minds of European countries—and to exporters in the USA.

Striking example of the thing we will have facing us repeatedly is now before Congress. John L. Lewis and the petroleum interests are trying to restrict the imports of petroleum into this country. Obviously the real purpose behind the proposed restrictions is to boost the price of petroleum and coal. Lewis knows he cannot get any higher wages for his miners unless he gets the price of coal increased, and he knows he can not get the price of coal increased unless he gets the price of petroleum increased. Therefore, he proposes restrictions on petroleum imports, anticipating higher prices.

Petroleum is a basic natural resource. It cannot be replaced. Once used, it is gone. Large quantities are used in the soybean industry, which is highly mechanized. Thus, the grower of soybeans is interested in anything affecting the price of his fuels.

But even more basically, our nation must import if it is to export. We must import raw materials. We must allow foreign nations to build up dollar credits in our nation if we expect to sell soybeans, cotton, wheat, lard and other agricultural commodities. Over one-third of all the soybean oil produced on American farms last year was exported as oil or beans. If we allow other interests to build up restrictions and trade walls, how are we to collect payment for agricultural commodities placed in world markets? Petroleum supplies are reputedly becoming dangerously short in our nation. We should, logically, conserve our short supplies and import from nations favored with petroleum, especially when those nations need our food and fiber. Venezuela, for instance, ships petroleum to us, takes our food commodities in return. Petroleum prices have been advanced to Midwest farmers in recent weeks, indicating there is no lack of markets for those products.

Are we not, as a nation, asking for severe criticism from other nations of the world, when we spend billions of dollars to break down trade barriers and restore production in other nations of the world, then do an about-face and build up our own trade barriers? Would it be possible to place ourselves in a more hypocritical situation?

Unless we watch developments in Washington we are going to find selfish interest groups and their representatives placing us in just such a spot. Import restrictions on petroleum would be a mighty good start down that road! And proposed by John L. Lewis at that!

CAN CREATE A BIG MARKET FOR MEAL

Livestock production in the United States is expanding faster than the production of high protein feeds. At a time when the production of cottonseed meal and linseed meal will both apparently be cut back from previous figures, livestock numbers continue to increase. This puts soybean oil meal in the unique position of being called upon to fill the gap.

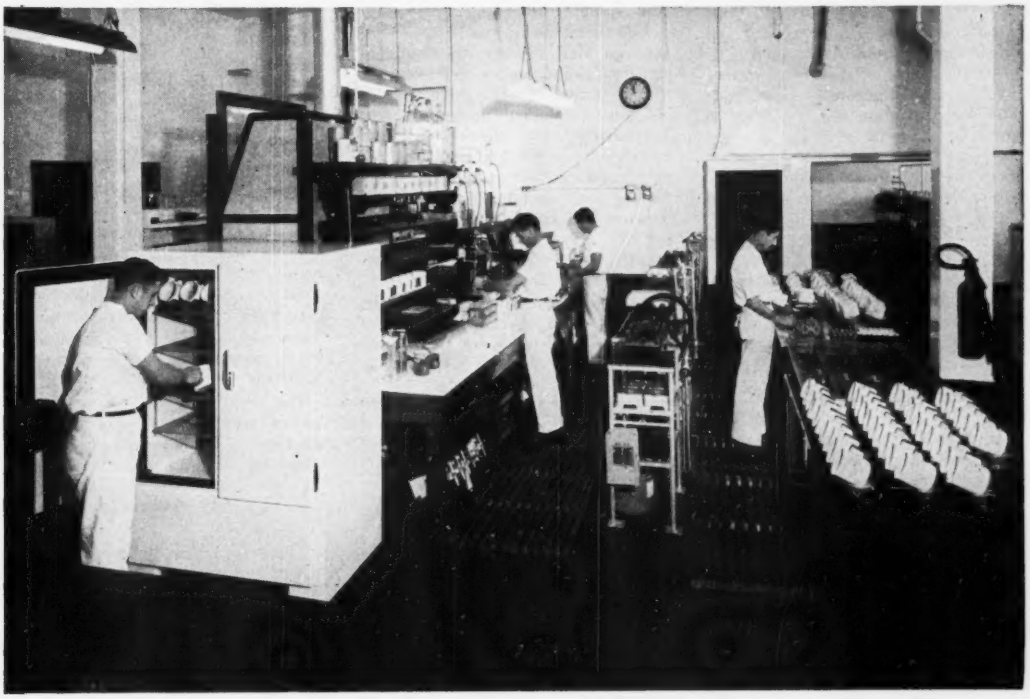
Based on current production of other protein feeds, it would require two and one-half times as much soybean meal as is now produced to provide balanced rations for U. S. livestock. That figure assumes that the entire increase in proteins comes through soybean oil meal.

Last year an estimated 4.2 million tons of soybean oil meal was fed to livestock. Cottonseed meal tonnage figured 2.35 millions. Total of all high protein feeds used was 11.375 tons, including animal and vegetable sources. It would require an added 6.68 million tons of soybean oil meal to bring the total up to optimum feeding standards.

On top of these figures comes the fact that the average protein content of corn used for livestock feeding is decreasing as yields increase. In 1948 it would have required the entire production of protein through soybean oil meal to replace the protein lost to feeding operations through the decrease in protein percentages of corn alone, when current protein contents of corn are compared with those of 15 years ago.

Perhaps we have been underestimating our potential market. We've a long way to go before we reach saturation of protein usage in livestock feeding. But the industry—and we do mean the entire soybean industry—needs an organized sales program for soybean oil meal.

Serving The Soybean Industry



The above is a view of our oil refining department at Memphis, Tenn., which has a capacity of 150 refinings daily. Our laboratories at Decatur, Ill., and Des Moines, Iowa, have the same type equipment for refining oils.

6 Chemical Laboratories to serve you.

- Decatur, Ill.
- Des Moines, Iowa
- Memphis, Tenn.
- Little Rock, Ark.
- Blytheville, Ark.
- Cairo, Ill.

WOODSON-TENENT LABORATORIES

MAIN OFFICES: 265 SOUTH FRONT ST. MEMPHIS, TENN.

SPECIALIZING IN SOYBEAN OILS — CAKE — MEALS — FEEDS

"Over ONE BILLION dollars worth of products analyzed since 1935."

ACTIVITIES OF YOUR ASSOCIATION

Soybean Oil In Margarine

A report of the Committee on Trade and Use Promotion of the American Soybean Association.

At the board of directors meeting in Sept. 1949, the committee on trade and use promotion was instructed to prepare a report on "The Use of Soybean Oil in Margarine." In accordance with those instructions the committee has made such study and submits the following report:

1—A questionnaire was sent to most of the margarine manufacturers and to all other known authorities on the subject. Replies to this questionnaire were generous but did not entirely meet the requirements of your committee.

2—The problem was submitted to the National Association of Margarine Manufacturers and as a result a 1-day conference was held in Chicago on Mar. 17, with the technical research committee of that Association. At that meeting the chairman of your committee made a report summarizing the answers received in response to the questionnaire. At this meeting our president, John Evans, our secretary, George M. Strayer, and Jake Hartz, Jr., a member of the executive committee, ably assisted in presenting the problems involved.

As a result of this conference the technical research committee of the National Association of Margarine Manufacturers agreed to assist in preparing a report based upon results of their studies and investigation.

3—This committee, capably headed by Dr. L. C. Brown, went to work to carry out their commitment.

At this point it should be explained that your committee asked the cooperation and assistance of the National Cotton Council and the producers of cottonseed oil.

Accordingly, the study was amplified not only to include the use of soybean oil in margarine but also the use of cottonseed oil and results derived from the use of blends of the two oils.

4—At a meeting in Chicago on May 23 this committee made a full report to representatives of the American Soybean Association and the National Cottonseed Crushers Association. Present at this meeting were representatives of the National Soybean Processors Association.

The report revealed that the study had covered a large range of characteristics and factors involved. These included flavor, texture, melting, physical characteristics at low and high temperatures, flavor stability and rancidity.

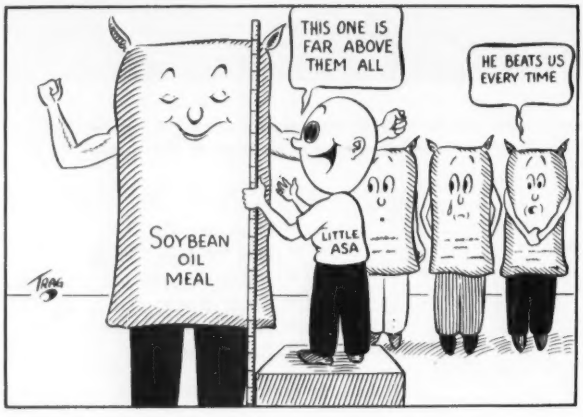
The report also included a study of the nutritional value of manufacturing properties of both soybean and cottonseed oil as well as blends.

5—The report was received and accepted as meeting the requirements of your committee.

6—For the information of those interested in soybean production it can be stated that soybean oil has firmly established itself as an important ingredient in the manufacture of margarine. It brought out the fact that rapid and important achievements have been made in improving the quality of soybean oil.

7—It was gratifying to learn that the manufacturers of margarine in the United States are pleased with the use of these two products from American farms. It appears at the moment that such advancement has been made that the margarine market has been captured for and by the producers of soybean and cottonseed oil in this country. Aside from the report your committee learned from several manufacturers that the margarine made from soybean and cottonseed oil is superior and meets consumer acceptance much better than margarine made some years ago from imported oils.

BY ANY STANDARD SOYBEAN OIL MEAL IS BEST



Scientific tests have proved that soybean oil meal is the best protein feed money can buy. Check the label of all feeds you buy for soybean oil meal content.

Adv. prepared by American Soybean Association, Hudson, Iowa

YOUR FIRM NAME

NOTICE: This advertisement is the third of a series on soybean oil meal designed for publication in newspapers. Feed dealers, processors, elevators and others who would benefit from these advertisements are invited to write for free mats to American Soybean Association, Hudson, Iowa.

Have You Ordered Your Mats?

Low Initial Cost ★ Low Overhead ★ Last Longer ★ Fire-Proof ★ Weather-Proof ★ Rodent-Proof

Expenses go down and profits go UP when you install Columbian Bolted Steel Grain Storage Tanks. That's because your original investment and overhead and maintenance are held to the minimum—you are sure of lower cost operation for years on end. An added money-saving feature of Columbian tanks is LOW COST ERECTION due to their bolted sectional construction.

COLUMBIAN

BOLTED STEEL GRAIN STORAGE TANKS

COLUMBIAN Storage Tanks are FIRE-PROOF . . . WEATHER-PROOF . . . RODENT-PROOF. They never crack or crumble . . . no caulking or patching is required. Actual service tests as long as 30 years prove them ideal for safe, efficient storage and handling of all small grains—**wheat, corn, oats, barley, soya beans, flax, cotton seeds, peanuts, rice, coffee beans,** etc. Hundreds are now in use by all kinds of feed processors.

After over a quarter of a century of manufacturing COLUMBIAN Bolted Steel Grain Storage Tanks, they continue to prove superior because of Columbian's exclusive and important details of design. Even after 30 years of service users have added rings to increase storage capacity.

Easy Ways to Erect—Detailed, easy-to-understand blue prints for erection are furnished so that tanks may be put up with any kind of labor—or we will provide supervisor for your own men—or a complete Columbian erection crew. Foundation specifications and blue prints are furnished to enable your local concrete contractor to build foundation.

FREE Engineering Service

All preliminary engineering service for designing tanks to your particular needs and arrangements provided free. WRITE FOR FREE ILLUSTRATED LITERATURE.

COLUMBIAN STEEL TANK CO. P. O. Box B-4226 Kansas City, Mo.

Associate Member of the Grain and Feed Dealers National Association

8—Your committee feels that a determined effort should be made to increase the per capita consumption of yellow table spreads. During the past 10 years the combined consumption of margarine and butter per person per year has decreased from over 20 pounds to less than 15 pounds. An effort should be made to regain this market for American agriculture.

9—Your committee desires to express its appreciation for the fine cooperation given by all concerned. —*Committee on Trade and Use Promotion, American Soybean Association, Ersel Walley, chairman, Fort Wayne, Ind.*

Protest Export Rate Change

Cancellation of the 19½c export rate on soybeans and certain other grain shipped by rail to New Orleans from points in southeast Missouri, Arkansas and Memphis, Tenn., was voted by the four railroads serving the area in May.

A hearing on the proposed cancellation was held before the Southwestern Freight Bureau, St. Louis, Mo., June 7. Representatives of the American Soybean Association and producers generally in the area were to be heard in opposition. They pointed out that the cancellation of the rate, with the regular rate of 28½c per hundredweight then applying, would mean a loss of about 10 cents a bushel on soybeans and grain produced in the area where the rate applies. They also stated that soybeans and grain would go to New Orleans by barge instead of rail.

Immediately on notice of the proposed cancellation, letters were sent by the American Soybean Association to all members in the areas concerned urging that members enter personal protests against the rate change.

GROWERS

May Overplant 1950 Crop!

A University of Illinois agricultural economist says that the big danger of present high prices for 1949 soybeans is that it will cause farmers to overplant the 1950 crop.

Larry Simerl says every indication points to a big increase in soybean acreage this year. Much land diverted by acreage allotments from corn, wheat, and cotton will be planted to soybeans.

Right now we have a fixed supply of 1949 soybeans on hand. Demands for export, seed, and processing are strong. Speculators furnish an added demand.

But these conditions will change at harvest time. The basic demands for soybeans and soybean products will remain strong, but the crop promises to be a record breaker.

Farmers will want to sell a large share of it direct from the combines. Marketing and processing facilities will be a bottleneck. Furthermore, buyers will not want to take any unnecessary price risk. The result will be relatively low prices at harvest time.

This situation has occurred many times before. Consequently it has been profitable during most years to store soybeans at harvest time and wait for a seasonal rise in prices.

Leading Producer Passes

J. E. Eversole, prominent landowner and business man of Hindsboro, Ill., died suddenly at his home Jan. 13, according to belated word reaching the Soybean Digest.

Eversole farmed 600 acres of land in the Hindsboro neighborhood.

J. E. EVERSOLE

About 200 acres were annually in soybeans. He was an active member of the American Soybean Association and took a keen interest in its affairs.

He had been a prominent hardware and implement merchant and Ford dealer at Hindsboro for over 50 years. He also owned a welding shop and was interested in the grain business. He retired in 1946, turning over active operation of his business to his son.

Fertility Slows Erosion

While cultivated crops like corn and soybeans once were blamed for the bulk of soil losses due to erosion, recent experiments have shown that even these row crops can be grown with comparative safety on soil well supplied with fertility and conditioned by grasses and legumes.

In experiments at the Soil Conservation Experiment Farm near MaCredie, Miss., corn and soybeans

CONVEYING-ELEVATING AND TRANSMISSION MACHINERY

Large stocks carried in our warehouse for prompt shipment.

Our Engineering Department at your service at no extra cost.

Phone — Write or Wire Us

RIECHMAN-CROSBY CO.

Front at Beale, Memphis, Tenn.

DEALERS IN MILL-MACHINERY AND ELECTRICAL SUPPLIES

"Serving Industry since 1895"

BURLAP BAG G.H.Q.

BEMIS

Burlap Bag general headquarters . . . Bemis . . . will be the dependable, convenient, ready-to-ship source for your burlap bag requirements, whatever the size of your order . . . and whether you want the famous Angus that only Bemis imports, or one of the standard grades.

Bemis is also a major supplier of cotton, paper and waterproof laminated bags and bag-closing materials.

Baltimore • Boise • Boston • Brooklyn • Buffalo • Indianapolis
Charlotte • Chicago • Cleveland • Denver • Detroit • Houston
Jacksonville, Fla. • Kansas City • Los Angeles • New York City
Louisville • Memphis • Minneapolis • New Orleans • Norfolk
Oklahoma City • Omaha • Phoenix • Pittsburgh • Salt Lake City
St. Louis • Salina • San Francisco • Seattle • Wichita

Here's why Bemis is Burlap Bag G. H. Q.

- Largest importer—You benefit from our large operations.
- Experience—Producers and users alike accept Bemis' grading of Indian burlap as the standard for the industry. You benefit from our knowledge of quality.
- Quality Bag Manufacturing—Just one example: Bemis close-stitch seams are as strong or stronger than the burlap itself.
- Bemis Band-Label Burlap Bag, with crisp, bright Bemis printing, set a new high in saleability for your product.
- Facilities — 16 plants and 15 additional sales offices, strategically located, assure a dependable source of supply and prompt service.

Bemis

both gave good yields without serious loss of soil by erosion in 1949, reports the Cooperative Farmer. In fact the loss of soil was lower in only 1 other year in the 9 years the experiment has been in operation. And the low marks in erosion both occurred in the last 3 years, in which adequate fertilizer treatments have been applied.

Erosion control by cropping is secured only after the soil fertility has been raised to levels at which lush crops of grass and legumes can be grown, comments D. D. Smith, who has been in charge of these experiments.

For the soybeans with soil treatments now for 3 years, the yields for 1949 were 36 and 30 bushels of seed per acre in a rotation of corn, soybeans, wheat and meadow, using rows 7 and 42 inches apart respectively.

It is incorrect to say that the crop is the cause of the erosion, except as the crop takes out the fertility, as cultivation of the crop decays the humus more speedily, and as the less fertile soil can't hold its structure under the beating of the rain so that high runoff and erosion must occur. Building the soils back in fertility means a reduction in erosion. At the same time it gives bigger and better feed crops to pay for the farming and fertilizer costs with a big margin for profit from the practice that leaves no bad name for any crop.

Speed With This Planter

This new planter (above) sows soybeans at 15 miles per hour, three times the usual rate. It was developed by the Georgia agricultural and engineering experiment stations mainly to provide close, even stands of peanuts at any speed at which a tractor can be operated. But any smooth seed of uniform size can be used in the planter.

Soybeans can be planted at 15 miles per hour with this outfit.

The efficiency of most commercial planting units falls off rapidly at speeds over 3 miles per hour. A 1-inch spacing of soybeans was obtained at speeds up to 15 miles per hour with this machine.

Seeds are picked up in holes in a conveyor belt that runs through the hopper.

Machine, called the Allen high speed planter, is still in the experimental stage. Lilliston Implement Co., Albany, Ga., plans to place the machine on the market if production difficulties can be eliminated.

This stand of soybeans was secured while planting at 12 miles an hour.

Drifting Spray Kills Beans

Are you planning to spray some ditchbanks with 2,4-D from an airplane? And is there a field of soybeans next to the ditch? If there is, you'd better spray before the beans come up; otherwise drifting 2,4-D will injure or kill the beans.

J. A. Weber, agricultural engineer, and Fred Slife, weed control specialist, University of Illinois, have been experimenting with airplane spraying of 2,4-D to learn how far the chemical will drift. They set out tomato plants at various distances from the spray swath, because tomatoes are easily killed by 2,4-D.

Slife reports that tomatoes were killed as far away as 400 feet, and probably would have been killed one quarter of a mile away. The wind speed during that particular test was 7 to 10 miles an hour. He adds that soybeans and legumes are also easily injured—and may be killed—by 2,4-D.

Ground spraying is safer than airplane spraying. The drift distance is much less because the spray boom is almost at ground level. But you'll still get some drift with ground spraying too.

State 2-0350
Teletype CG283

New York
Memphis
Dallas
San Francisco

Zimmerman Alderson Carr Company

Chicago

BROKERS TO THE SOYBEAN PROCESSOR

ANOTHER BLAW-KNOX EXTRACTION PLANT NOW IN OPERATION

Experience in working with Blaw-Knox on the Iowa Falls plant gave Ralston-Purina confidence in the Blaw-Knox extraction system and in the efficiency of our engineering and construction. When Ralston-Purina saw the need for a plant at Bloomington, Illinois, Blaw-Knox was asked to build the entire job. Production table at right shows how far output exceeded our guarantee.

Whatever your plant expansion or modernization plans—Chemical Plants Division offers complete facilities, broad experience, and skilled personnel to do the entire job with economy and dispatch. Before you start—call in Blaw-Knox.

RESULTS OF SOYBEAN EXTRACTION PLANT TEST RUN
RALSTON-PURINA COMPANY, BLOOMINGTON, ILLINOIS

	Guarantee	Average for 3-day test period
Pounds of beans corrected to 12% moisture	400,000	429,500
Average rate in tons per day	200	215
Per cent solvent loss	.70	.33
Residual oil in extracted flakes corrected to 12% moisture	.50	.36
Oil Quality — % moisture and volatile matter	.20	.15
Oil Quality — Flash point		over 300° F.
Average steam rate pounds per hour	8,500	8,226
Average process power KW	240	221

CHEMICAL PLANTS DIVISION

BLAW-KNOX CONSTRUCTION COMPANY • 321 PENN AVENUE, PITTSBURGH 22, PA.

Two Views on Supports

It is "doubtful" that farm price supports are needed to maintain a fair farm income in times of high world prices and active business such as we've had since the war.

That's the view given by L. J. Norton, agricultural economist in the Illinois College of Agriculture.

Norton believes that even without supports prices of corn, soybeans, and wheat would not have averaged much below actual market prices for the past 2 years. The reasons—high world price levels, good economic conditions, and relativeiy good hog prices.

Norton says if price supports are set too high, we store up trouble for the future. Price supports may lead to stock-piling of supplies. Later when this surplus is sold, prices will be lower than they would otherwise have been.

Surpluses lead to acreage allotments which lower the probable output of farmers who comply. And if production is lower, future prices will tend to be higher.

Trade Committee

A report rapping price supports as "nationalistic" and urging flexible farm programs to permit foreign trade to expand was handed recently to Secretary of Agriculture Charles F. Brannan, by the Foreign Agricultural Trade Advisory Committee.

The Committee was formed in Nov. 1949 to advise the Department of Agriculture on foreign agricultural trade. It is composed of representatives of farm organizations, land-grant colleges, the farm press and agricultural industry.

"Any agricultural or other program which endeavors to maintain prices above market levels for any considerable share of the time is inevitably nationalistic," stated the report. "It comes into conflict with efforts to develop international trade and other forms of international cooperation."

The Committee said high price supports take us back on the road to isolationism because:

1—They lead to well-nigh irresistible demands that trade barriers be raised to keep products of other nations from sharing in the artificially high prices.

2—They involve keeping American resources out of fullest use to curtail output in order to raise prices. It is not logical that imports which will defeat that objective will be acceptable.

3—They increase the difficulties of exporting because prices are above those from competing sources of supply.

4—They foster programs of export dumping that invite retaliation from other countries.

5—They encourage an expansion of state trading because of government controls.

6—They encourage similar nationalistic programs in other countries.

"While the inevitable adjustments in the postwar pattern of international trade will probably impose rather heavy adjustment problems on some segments of agriculture, it must also be recognized that similar adjustments may be required of other segments of the American economy," stated the Committee.

"To the extent that non-agricultural imports into this country may be developed as a result of a high level of domestic business, a high level of world production and trade, and a minimum of restrictive barriers, the necessary downward adjustments in our important agricultural industries may be minimized."

— s b d —

Soybeans are visualized as a possibility in the warm, sandy soil of South Alberta, to provide a cash crop and a protein concentrate for livestock, reports Canadian Finance.

Railroads make Good Neighbors

It's true, of course, that America's railroads literally border hundreds of thousands of American farms, but what really makes farmers and railroads neighbors is their dependence on each other. Farmers supply railroads with a large part of their freight business – and railroads, in turn, serve the farmers – assembling in major crop areas the great fleets of cars required for the dependable movement of the huge production of today's progressive agriculture.

To speed and improve the handling of freight of all kinds, the railroads in the last five years alone have spent more than four billion dollars for modern locomotives, new freight cars, heavier rail and new signal and yard facilities. All these mean better service to all railroad customers, and especially to farmers.

In providing the vital transportation the nation needs, the railroads build and maintain their all-steel highways entirely at their own expense. What's more, on all their property they pay taxes which benefit every community they serve. In thus sharing materially in the cost of schools, courts and other local government services in rural areas, as well as in towns and cities, the railroads are indeed good citizens and good neighbors.

ASSOCIATION OF AMERICAN RAILROADS

WASHINGTON 6, D. C.

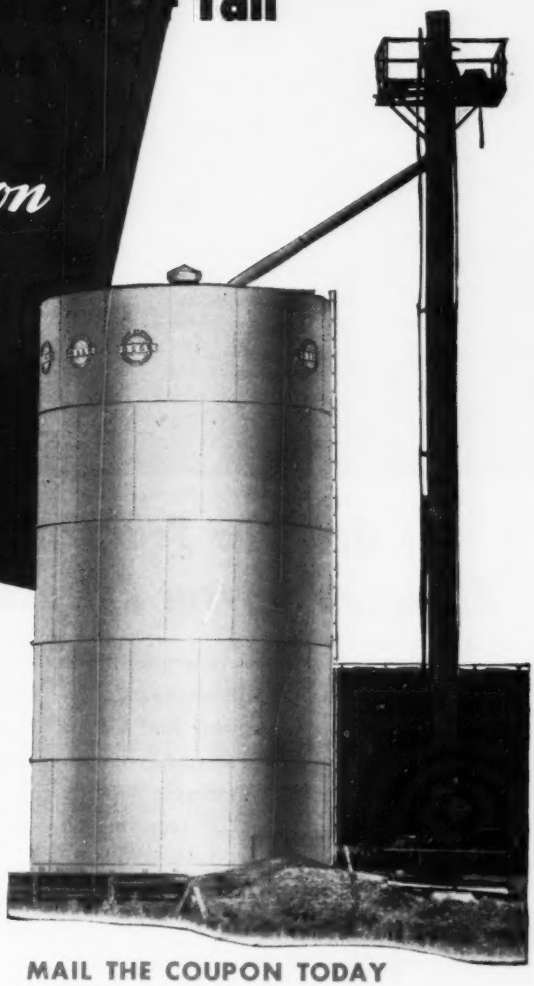
Listen to THE RAILROAD HOUR every Monday evening on NBC

Match Your Needs

One or [illegible] Tall

Flexibility
Speedy Erection
Low Cost
Permanence
Safety
of **BS&B**

BOLTED STEEL GRAIN BINS



• Not only HOW MUCH you need, but WHERE you want it is so easy with BS&B Bolted Steel Bins! Storage for a million bushels or a thousand is shipped knocked down. Quick assembly is accomplished by BS&B's own crews . . . on your own foundation or a complete "turnkey" job. Place them for maximum utility . . . move them from point to point along railroad track facilities.

Bolted Steel storage not only costs less to buy and install . . . it needs less maintenance. No chipping, no cracking, no rotting . . . just a little paint once in a while.

BS&B Tanks are firesafe, weather and wind resistant, insect and rodent-proof. Extra rings are easily added. They can be dismounted and moved easily and quickly.

Whatever your requirements, whatever your budget . . . BS&B Bolted Tanks do it better, at less cost!

Elevator Storage Section
BLACK, SIVALLS & BRYSON, INC.
KANSAS CITY • TULSA • OKLAHOMA CITY

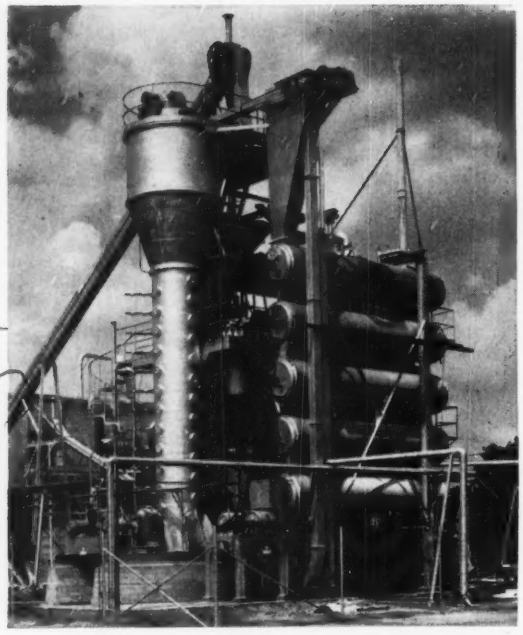
MAIL THE COUPON TODAY

Get the facts about wheat, soybeans, rice, oats, peanuts, cottonseed oil and many other types of BS&B storage!

BLACK, SIVALLS & BRYSON, INC. Section B-51-6
720 Delaware St. Kansas City 6, Mo.

Send complete information about BS&B Bolted Grain Tanks
☐ Add details for _____ bushels storage. ☐ "Turnkey" information ☐ Have Sales Engineer call.

NAME _____ TITLE _____
FIRM _____
ADDRESS _____
TOWN _____ STATE _____



OPERATING EXPENSES

- No Building to Maintain
- Less Interest on Investment
- Less Taxes
- Minimum Labor

Over the Years Anderson Solvent Extraction Units COST LESS

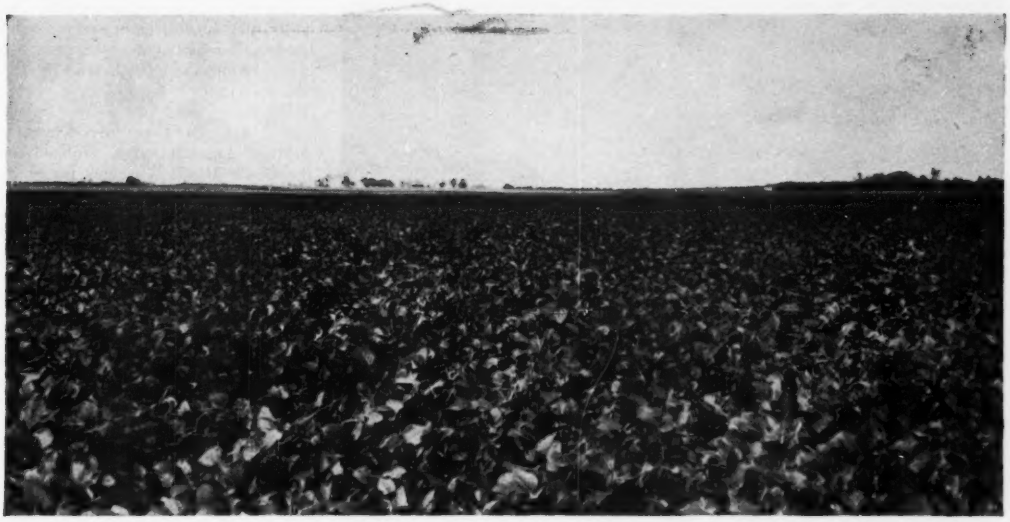
By 1960 owners of Anderson Solvent Extraction Units will have found operating costs appreciably less! Of the major suppliers of solvent extraction equipment only Anderson supplies an outdoor type . . . requiring no costly closed or open-sided building and operated by minimum labor from a remote control panel. The oil miller benefits financially in a number of ways. He has no large building to erect or maintain . . . his interest rates are less on a smaller investment . . . as well as his taxes. The remote control operation simplifies the salary structure. *Such savings over the years really mount up!* For the most economical way of extracting oil from soybeans, consult The V. D. Anderson Company, the organization with the most experience in oil milling, and the only company to supply all three major extraction processes, Expellers*, Exsolex** and Solvent Extraction.

THE V. D. ANDERSON COMPANY
1976 West 96th Street • Cleveland 2, Ohio

*Exclusive Trade Mark Reg. in U. S. Pat. Off. and in Foreign Countries
**Patent Rights owned by The V. D. Anderson Company

ANDERSON

EXPELLERS
SOLVENT EXTRACTION
EXSOLEX



"Soybean is Queen"—It is not uncommon for fields to extend as far as the eye can carry in central Illinois.

ASA's 1950 Convention Will Be in

BIG BEAN COUNTRY

Your trip to the American Soybean Association's 30th annual convention will take you to the very heart of soybean country.

Springfield, Ill., where you go for 3 big days Aug. 28, 29 and 30, lies in the rich, black flat lands of central Illinois where more soybeans are produced than anywhere else in the world.

Illinois is by long odds the nation's leading soybean-producing state. It produces and processes well over a third of the national crop each year.

Sangamon County, where Springfield is located, stands fourth in soybean production in the state. Nearby are Champaign, Vermilion and Christian, the nation's leading soybean counties. Twenty-seven counties in central Illinois produced a million bushels each in 1949!

Big soybean crops are the rule in the area. Per-acre yields of 30 to 35 bushels are common, and above 40 bushels not rare. The state average in 1949 reached the astonishing figure of 26 bushels, never equalled by any other state!

It is not uncommon for soybean fields to extend as far as the eye can carry in central Illinois. Here are located some of today's big bean growers. And here the names of the nation's leading pioneer producers are well remembered—such men as Smith, Meharry and Riegel.

Here huge grain elevators—the "country skyscrapers"—tower over the railroad tracks in every town. They testify to the fact that if corn is king in central Illinois then the soybean is queen. The grain men have had experience in handling the crop that dates back a quarter-century or more.

About 75 miles northeast of Springfield lies Champaign-Urbana and the University of Illinois. Here the pioneering experimental work with soybeans has enabled the state to hold the national lead in soybean production for 25 years. And from here has come much of the original impetus that has made soybeans a big crop nationally. (The names of Burlison, Woodworth, Hackleman and other University men will long be mentioned wherever men gather to talk soybeans.)

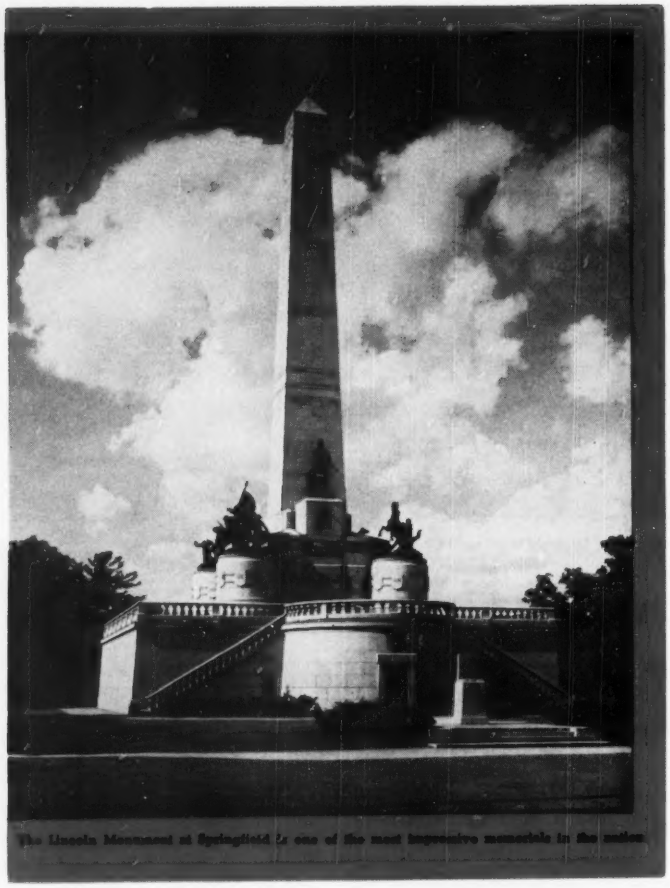
Circle the dates Aug. 28, 29 and 30 on your calendar.

More Profits

At Urbana you will also find the U. S. Regional Soybean Laboratory, where the varietal improvement program has sparked the drive to higher yields and more profits for the whole soybean belt.

About 75 miles due north of Springfield is Peoria and the Northern Regional Research Laboratory where research into usage of soyproducts is centered.

Forty miles east is Decatur, often called the soybean capital of the world, since some of the largest



The Lincoln Monument at Springfield is one of the most impressive memorials in the nation.

processing plants are located there. And about 30 miles southeast is Taylorville. Here a soybean festival is held and a soybean queen named each fall.

Illinois leads all other states in soybean processing. According to Illinois Business Review 46 percent of the value of the 1947 crop was processed in Illinois plants. The Soybean Blue Book lists 33 soybean processing plants in the state. Many of these are located in the central producing area, and included are the nation's largest plants.

There are four refiners of soybean oil. And the state leads all others in the manufacture of margarine.

At Springfield itself Cargill, Inc., maintains a six-Expeller plant with a daily capacity of 125 tons. Pillsbury Mills, Inc., has a large flour mill and pre-mix plant in Springfield. These are among the not inconsiderable manufacturing industries of the city.

The city of Springfield, which is the state capital, has adequate facilities for a convention. All meetings will be held in the Illinois State Armory. It is big enough to accommodate the largest convention, and its facilities for display booths are unique. Firms that serve the industry will again be given the opportunity of exhibiting. If you wish a booth write Geo. McCulley, business manager, American Soybean Association, Hudson, Iowa.

Hotel accommodations will be furnished by the Leland and Abraham Lincoln hotels. Both are strictly modern.

Not the least appealing feature of Springfield is its history. It is the city more than any other that is associated with the name of Abraham Lincoln. Lincoln lived in Springfield many years, was living there when he was elected president.

The only home Lincoln ever owned is in Springfield. It is now maintained by the state, much as it was when he lived in it.

He is buried in Springfield, beneath the Lincoln monument. The tomb and monument are among the most impressive memorials in the nation.

Nearby is the town of New Salem where Lincoln lived for 6 years, courted Ann Rutledge, enlisted in the Black Hawk War and failed in business.

One of the features of the convention will be a ladies' tour that will include the Illinois State House, the Lincoln home and monument and the town of New Salem.

Springfield has excellent transportation connections by railroad, highway and airline with all parts of the nation. It is served by the Illinois Central, the Alton Route, Baltimore and Ohio, Wabash, Chicago and Illinois, Midland, Illinois Terminal Railroads, and by the American Airlines.

—s b d—

GROWTH PROMOTING DRUG

An antibiotic drug, aureomycin has been shown to be a potent growth promoting factor for farm animals, it was reported before the American Chemical Society at Philadelphia.

Drs. T. H. Jukes and E. L. R. Stokstad of Lederle Laboratories, declared that their data and those of agricultural experiment stations indicate the growth effect is exerted by the drug in pure form.

The results reported were obtained with chicks and turkeys on corn-soybean rations and with swine on a corn-peanut meal ration. Vitamins were supplied in synthetic form. There was no natural B-complex source in the basal ration.

The growth periods were 21 to 25 days in the case of the chicks and four weeks in the case of poults.

Aureomycin by mouth brought superior growth in chicks on the basal ration even when they were given generous amounts of vitamin B_{12} by injection.

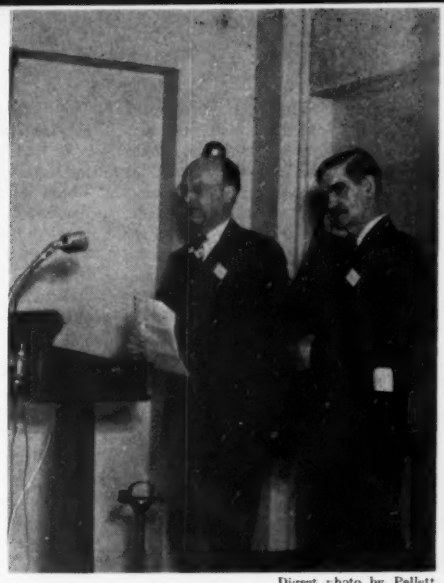
This discovery of a growth-promoting effect of aureomycin stems from efforts by many research workers to unravel the factors of the animal protein factor (APF), the utility of which in practical animal feeding is now accepted.

While vitamin B_{12} is one APF component, it has been recognized for some time that other, unidentified factors are also essential. Various quantities of these accessory factors, which enhance the practical effectiveness of APF concentrates, have been found in different fermentation residues.

LIME as a Hardening Agent in Soybean Oil Paints

By A. J. LEWIS

Northern Regional Research Laboratory*
Peoria, Ill.



Digest photo by Pellett
Dr. Lewis (right) and Director R. T. Milner of the Northern Regional Research Laboratory, Peoria, Ill., at the soybean conference at the Lab where this talk was given.

BEFORE THE SECOND World War, soybean oil was not considered favorably as a drying oil because of its slow drying properties compared with linseed and tung oils. Many paint men claimed that coatings containing soybean oil were extremely tacky and had a tendency to retain dust and dirt as fly paper retains flies. Dirt retention spoils the appearance of coatings and makes repainting difficult. The dirt is often so deeply imbedded that it cannot be removed by washing without damage to the coating or by self-cleaning.

In self-cleaning, the ultraviolet rays of the sun penetrate the coating and the surface disintegrates into loose chalk-like particles. When these particles, aided by rain, are washed off the surface, they carry most of the accumulated dust and dirt with them, and the coatings become clean again. However, if penetration of the sun's rays is retarded or entirely prevented by the presence of excess dirt, especially when imbedded in the coating, the coating does not chalk and self-clean, but remains dirty and unsightly in appearance.

The short supplies of favored linseed and tung oils during and following the war compelled chemists and technologists of the paint and varnish industry to learn how to use soybean oil in their formulations. Their success is apparent. The utilization of soybean oil as a drying oil has increased rapidly during the past 3 years. The paint and varnish industry used nearly 150 million pounds of soybean oil in 1949, used 100 million pounds in 1948, and 89.5 million pounds in 1947. The amount used in 1947 was only 6 million pounds less than the total used in the previous 4 years, 1943-1946 inclusive.

The tremendous growth in the utilization of soybean oil by the paint and varnish industry can be attributed mainly to the increased production of alkyd enamels. In the manufacture of alkyd enamels, especially whites and light tints, soybean oil has always been favored, despite the slowness of its drying, because of its non-yellowing properties. The percentages of soybean oil used in making the clear alkyd varnishes have steadily increased from 20 percent in 1938, to 100 percent in many alkyds at present.

Another factor contributing to the increased use of soybean oil in the paint and varnish industry has been the improvement in its drying qualities brought about by chemical and physical treatments. A few of these treatments are:

1—Reaction of soybean oil or its fatty acids with maleic anhydride or pentaerythritol and often with both.

2—Co-polymerization reactions between soybean and tung oils or between soybean oil and styrene.

3—The separation of soybean oil into its drying and non-drying fractions by furfural, propane or other solvents.

Many other treatments are either in production or in the pilot plant stage.

The Northern Regional Research Laboratory has been investigating recently the merits of lime as a hardening agent in 100-percent soybean oil paints. This work was brought about in connection with studies on the catalytic isomerization of soybean oil. It was found that the isomerized oil, when made into lead paints, dried rapidly to coatings free from residual tack. However, these coatings, after an outdoor exposure of a week in hot, humid weather, "after-tacked" badly and collected large amounts of dirt that could not be removed by washing, because the coatings remained too soft too long.

A few words in explanation of the meanings of residual tack and after-tack may be in order. *Residual tack* is the tacky surface condition that remains on a coating for a limited time after the coating is applied. Soybean oil paint coatings tend to retain a residual tack condition longer than similar linseed oil coatings. *After-tack* is the change from a dry and apparently solid coating to one that is soft, tacky, and almost liquid because of high temperature and humidities. After-tack may occur with the use of all vegetable oils, but is more pronounced with coatings containing soybean oil.

While experimenting with many pigments and chemicals that might

* One of the laboratories of the Bureau of Agricultural and Industrial Chemistry, Agricultural Research Administration, U. S. Department of Agriculture.

eliminate this after-tack when used with basic lead carbonate, the oxides of lead, zinc, strontium, magnesium, and calcium were found to be more-or-less efficient in eliminating both residual and after-tack. Calcium oxide or lime, because of its low price and abundance was selected for the bulk of this Laboratory's experimental work, even though its use resulted in coatings that dried "flat." Flatness is not considered too serious an objection because glossy coatings generally lose their gloss soon after exposure to the sun. In fact, it might be considered an advantage because the flat coating remains uniform in appearance in service while the glossy coating is glossy where protected and flat where exposed to the sun.

To test the relative merits of calcium oxide and other pigments or chemicals, a large number of paints were made in the laboratory. Most of them were pigmented with basic lead carbonate because such coatings show a greater tendency to develop after-tack with soybean oil. A few were pigmented with leaded zinc, titanium-barium, and zinc sulphide-magnesium silicate. The oils used were either soybean or linseed as single oil vehicles. Most of the soybean oil was non-break, with an iodine number of 135 and an acid number of 2.0. All oils and pigments were obtained from commercial sources. The coatings from these paints were tested comparatively for their qualities of drying, non-yellowing, gloss retention, light reflectance, dirt retention, and durability.

Drying Qualities

The drying qualities of the experimental paints were determined comparatively on a Sanderson drying meter in a special room maintained at constant temperature (77° F.) and constant humidity (50±3 percent relative humidity). The Sanderson machine is designed to drop sand uniformly at a constant speed in a spiral track upon the coating for 72 hours of drying time.

Two drying times were determined, one called "set-to-touch" and the other "free-from-tack." The first is the time required for the coating to dry sufficiently that the sand deposited on the coating cannot be brushed from it with a bristle brush. The second is the time required for the coating to become tack-free—where the sand deposited on the coating falls off completely when the coating is inverted and tapped sharply with a brush handle. The latter represents freedom of residual tack.

It had been noted from the drying time determinations that the addition of 4 percent lime definitely decreased the set-to-touch drying times of soybean oil paint coatings pigmented with basic carbonate lead or titanium-barium. It definitely improved the free-from-tack drying time of lead carbonate-soybean oil paints.

Non-Yellowing Qualities

A comparison of the non-yellowing qualities of soybean oil paints containing 4 percent of lime and similar paints containing other pigments or chemicals was made, with the paints being brushed on cedar siding panels in three coats. At the end of 1 month's storage in a dark room, the coatings containing calcium or magnesium oxides remained white in all cases while similar coatings without calcium or magnesium oxides were yellowed to a more-or-less degree.

Gloss Retention and Light Reflectance

The gloss retention and light reflectance qualities of a number of soybean oil paint coatings were determined by the Hunter Portable Photoelectric Glossmeter (45°, 0°). The determinations were made on the coatings before and after the cedar siding panels, brushed with three coats of each paint, were exposed to outdoor weathering tests for 1 week and for 8 months at an angle of 45° south.

The gloss retention determinations showed that the coatings containing 4 percent lime, low (13-20) before exposure, remained practically unchanged. Similar coatings without lime or with other materials, showed a definite loss of gloss —sometimes as flat as the lime coatings.

The light reflectance determinations showed that coatings containing 4 percent of lime lost very little of their original light reflectance qualities during the exposure period of 8 months. The light reflectance qualities of similar paint coatings without lime dropped noticeably in this test.

Dirt Retention

The dirt retention qualities of a number of soybean oil coatings were tested on cedar siding panels by outdoor weathering at 45° south during July. After a month's exposure, the coatings were washed with running water and the following results observed:

1—Only those coatings containing 4 percent lime were clean and free from dirt retention with all pigmentations.

2—Coatings without lime retained dirt in degrees varying from light to heavy.

3—Coatings containing 4 percent of magnesium or strontium oxides or 20 percent of zinc oxide showed only slight dirt retention.

Durability

The durability of paint coatings containing either linseed or soybean oil was determined by accelerating weathering in the laboratory or by outdoor weathering tests at 45° south or at 90° north or south. The results of all tests, which were in good agreement, showed:

1—Lead carbonate paint coatings containing either linseed or soybean oil and 4 percent of lime were definitely better than similar paint coatings without lime.

2—The soybean oil coating containing lead carbonate and 4 percent of lime was superior in durability to the similar linseed oil coating.

3—Soybean oil paint coatings containing lead carbonate and 4 percent of lime were superior in durability to similar paint coatings containing the same percentage of magnesium oxide, asbestine, zinc oxide, strontium oxide, or other similar materials.

4—The cracking tendencies of soybean oil paint coatings pigmented with either leaded zinc or zinc sulphide-asbestine were reduced when 4 percent of lime was added to the pigmentations.

Conclusions

It is apparent from the experimental results that the addition of 4 percent of lime to soybean oil paint coatings improves the coatings in the following respects:

1—The coatings become free from residual tack in a shorter time and are therefore more resistant to dust, dirt, and bug retention.

2—The coatings dry to greater hardness and are more resistant to the development of after-tack.

3—As a consequence of the improved drying qualities, the coatings do not yellow in dark and sheltered areas, have better light reflectance, have longer durability, and have improved repainting values.

—s b d—

When you write to our advertisers be sure to mention the Soybean Digest.

OPERATORS FROM 10 STATES AT PEORIA

What has developed into an annual conference of cooperative soybean oil mill operators was held again this year at the Northern Regional Research Laboratory May 1-3. The operators were afforded an opportunity to review the soybean research being conducted at the Northern Laboratory and to discuss business problems with representatives of the cooperative research and service division of the Farm Credit Administration.

The first day's discussions covered the Laboratory's current soybean research program and recent results of that work, stressing improvement of the nutritional value of soybean meal, progress of research on flavor stability of edible soybean oil, and the development of new products such as Gelsoy from soybean protein. The program, with slight deviation, was essentially the same as presented during the industrial processors conference at the Laboratory last February.

One exception was a talk on the determination of solvent losses in oilseed extraction plants, by O. L. Brekke of the Laboratory's engineering and development division. His discussion was based upon three German reports written by Dr. Herman Pardun, covering sampling methods, analytical procedures, and determinations on two occasions of solvent losses at various points in the extraction system of a commercial plant.

As a result of the experimental work, Dr. Pardun arrived at three conclusions:

1. In commercial oilseed extraction, the chief losses of "benzine" are of such nature that the composition of the benzine is not changed.
2. The principal loss is through leaks in the system, and next, through improper operation of the equipment for removal of solvent from the oil and the flakes.
3. The amount of benzine lost in the solvent recovery apparatus—that is, the vent gases and in the polymerizable portion of the *fresh* benzine—is so small as to be negligible in discussion of solvent loss.

Among the subjects discussed during the second day's meetings, under the chairmanship of Dr. Ward W. Fetrow, were: Advantages and limitations of soybean meal as a food for animals, by Tom S. Hamilton, professor of animal nutrition, University of Illinois; financial problems in buying and selling soybeans, by A. J. Loutch, M.F.A. Grain and Feed Co., St. Joseph, Mo., and A. J. Roffers, Northwest Cooperative Mills, St. Paul, Minn.; processing problems, by Maurice Maze, M.F.A. Cooperative Grain and Feed Co., Mexico, Mo.; and new developments and problems in solvent extraction, by G. W. Allen, Ohio Valley Soybean Cooperative, Henderson, Ky., and E. A. Mengering, Farm Bureau Cooperative Elevator and Soybean Plant, Springfield, Ohio.

Closing discussions on Wednesday were led by Daniel H. McVey, economist of the Farm Credit Administration, who gave a summary of operations of cooperative soybean oil mills. He was followed by Earl F. Halverson, wage and hour division of the Department of Labor, who spoke on the application of the new minimum wage law to soybean oil mills.

Because of the increased use of solvent extraction plants, great interest was shown in the developments of this new process, the problems encountered and the relative advantages and disadvantages of this process compared to Expellers. There was also considerable discussion of the relative merits of using trichloroethylene or hexane as a solvent.

The various processing problems encountered in Expeller operations from the time the soybeans enter the plant until the oil and meal are obtained were discussed.

Expenses of operation and factors affecting costs were discussed at some length. One of the greatest problems in this connection is to get the accounts set up on a uniform basis so various items of cost will be comparable.

The last subject discussed was the application of the new minimum wage law to soybean oil mills. Emphasis was placed on the necessity for keeping accurate records of time worked and rates paid for employees coming under the act.

States represented by those attending included Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Minnesota, Missouri, Nebraska, and Ohio.

—s b d—

JAPAN SCHEME

Loss of much of her shipping during the war caused Japan to make plans to use ocean currents to float soybeans and other necessities from Manchuria and other points, reports National Defense Transportation Journal.

Plans were made for floating metal drums which would drift below the surface in the Japan current. Loss of the Philippines prevented carrying out the plan.

New USDA Soy Flour Laboratory

C. W. Ofelt, left, and Robert E. Dorges in the soy flour baking laboratory at Northern Regional Research Laboratory.

Above is a general view of the soy flour baking laboratory recently installed at the Northern Regional Research Laboratory, Peoria, Ill. Here soy flours of experimental origin are being evaluated in comparison with commercial soy flours of different types and origins. The objective is to afford manufacturers sufficient information so that soy flours of uniformly good quality may be produced on an industry-wide basis.

The baking laboratory is under the supervision of Dr. J. C. Cowan, head of the Northern Laboratory's oil and protein division.

Changes In World Soybean Production

By MERNA IRENE FLETCHER

WORLD SOYBEAN production in 1949 fell 10 percent below the record harvest of 558.4 million bushels in 1948. According to the May 1 report made by the Office of Foreign Agricultural Relations of the United States Department of Agriculture, world production in 1949 amounted to 507.1 million bushels. This is the smallest harvest in postwar years. The United States, China, and Manchuria, the three outstanding producers, all reported smaller crops than for 1948 as did several minor producing countries.

The seven major producing countries retained their leadership, but only the top three maintained the same relative position as for 1948. Japan outranked Korea for fourth place; while Indonesia, which is not yet back to prewar production, surpassed Korea.

A look at the individual countries shows that the United States is again the world's largest producer by a considerable margin. The Department of Agriculture's final report for the 1949 crop year gives the United States soybean crop as 222,305,000 bushels. This harvest is only slightly lower than the 1948 record crop, but it is 50 percent larger than the 1938-47 average of 148 million bushels. The yield of 22.4 bushels per acre in 1949 is the highest recorded average for the United States. This exceeds the 1948 yield by a bushel per acre. The average for the past 10 years was only 18.7 bushels per acre. In Illinois, where more than one-third of the crop was produced, the 1949 average was a record yield of 26 bushels per acre.

Record, or near record yields, were produced also in Iowa, Ohio, Indiana, and Minnesota. These states, together with Illinois, constitute the main producing states of the major soybean belt of the United States. This area accounted for almost 200 million bushels of soybeans in 1949. Record yields were also reported in the Delta Country where southeast Missouri and Arkansas together produced nearly 24 million bushels. The South Atlantic region had a good harvesting season, the first time in 3 years in North Carolina, so that previous yields were equalled or surpassed.

The large crop for the United States is the result of unusually high yields per acre in most of the major producing states since there was a decreased acreage in 1949. Of the total 12 million acres planted to soybeans for all purposes, 9,912,000 acres were harvested for beans. The total acreage planted for all purposes in 1949 represented a decrease of about one-half million acres from 1948.

Soybean production in Canada continues to increase as it has for the past 6 years. The 1949 harvest of 2.6 million bushels is 43 percent greater than for 1948. This is the greatest increase recorded for any country in 1949. Canada's average yield per acre was 25.1 bushels or nearly 3 bushels per acre higher than the United States average and 5.7 bushels higher than her own 1948 average. In spite of increased yield and production, Canadian imports of soybeans and oil, in terms of beans, amounted to 870,000 bushels. To meet the increasing demands of the margarine industry, both production and imports of soybeans can be expected to increase even more in 1950 in Canada.

Soybean belt is moving both north and south in the Americas. Here are experimental plots at the Ontario Agricultural College.

In Brazil

Elsewhere in the Western Hemisphere, Brazil is the only country with recorded production for 1949. As in Canada, there is a steady increase shown. Only estimates are available but they indicate a 1949 crop of 1 million bushels which is more than double the figure for 1947. Reports show that 400,000 bushels, or slightly more than half of the 1948 crop, were exported. It is estimated that shipments were much larger in 1949.

European production continues to decline. The only country reporting during 1949 was Italy. The 1949 crop fell far short of expectations. It was only 52,000 bushels as compared with 107,000 bushels in 1948. Average yields of 18.3 bushels per acre were off 3 bushels from the 1948 average. It is to be expected that the U.S.S.R. is producing on an increasing scale. The extensive research program begun several years ago is no doubt bearing fruit, particularly in the Soviet Far East where Balzac* reports a big development in the Amur-Ussuri River Valley.

The major decline in world production occurred in Asia, more specifically in Manchuria and China. This was formerly the world's greatest producing area. China's efforts to increase production failed; for while acreage was increased from 11,309,000 to 11,762,000 acres, yields decreased from an average of 18.6 bushels to 15.2 bushels per acre. The total Chinese crop of 179.2 million bushels is 15 percent less than the 1948 crop. That year

* Balzac, et al Econ. Geog. of USSR. Amer. Ed.

In 1949

China's crop nearly equalled that of the United States.

Manchuria's soybean production continues to decline. The 1949 crop of 66 million bushels was less than half that of the prewar years. Acreage has dropped from close to 9 million average for 1935-39 to 5½ million acres. At the same time yields have dropped from a high of 17.9 bushels per acre to 12 bushels. Acreage once devoted to soybeans continues to be diverted to production of food grains, partly because of the difficulties involved in marketing the beans. Indications are that any surplus of Manchurian soybeans and oil is now being sent to the Soviet Union, though export data is not available for Manchuria and North Korea.

Korea

No figures have come out of North Korea since 1946. Previously, it was the great producing area of the country. South Korean production continues to show marked increase. The 1949 crop of 6,654,000 bushels is 1.7 million bushels more than was produced in that area in 1948. The average production for Korea from 1935-39, when most of production was in the north, was 17,654,000 of which less than 2 million bushels were produced in South Korea. This shows that with the increased production in the South, Korea could be a very significant producer. The entire South Korean crop is consumed at home either as food or in manufactured edible products. So far there appears to have been little if any commercial production of oil in South Korea. There is, however, a government-sponsored program for 1950, which calls for the production of 250 to 300 tons of oil from soybeans harvested in the fall of 1949.

Indonesia's new government apparently is interested in expanding soybean production. At the Agricultural Conference held in Buitenzorg in Java recently, it was suggested that production be increased 3 to 4 million bushels. Output in 1949 fell short of the 1948 crop by more than 2 million bushels. Exports of soybeans or oil are under government control.

Indonesian production for 1949, which was early estimated to exceed Japan, did not reach the Japanese figure by 1.6 million bushels. The Japanese crop is reported at 8,892,000 million bushels. However, it is difficult to secure accurate estimates for Japan since plantings are principally in small plots for direct consumption by the producer. Probably not more than one-tenth of the total crop is available for oil extraction. Prior to World War II, Japan depended on imported beans chiefly from Manchuria, to supply her oil needs. During the first half of 1949, Japan received 11,000 bushels from Indonesia but the great bulk of her imports were from the United States.

Despite the interest manifested, neither Australia nor Africa has yet produced a significant crop. There is no 1949 report from Australia while that from Africa indicates that production estimates for earlier years were too high. The 1949 report from Tanganyika is only 36,000 bushels; the Union of South Africa reported 80,000 bushels or the largest crop ever produced there. Tanganyika's crop was much less than half the 1948 crop while the Union of South Africa's represents an increase of 13,000 bushels over 1948. Yields per acre are extremely low with an average of but 5.3 bushels per acre in 1949.

As a continent Asia still retains production leadership, but the 1949 total of 268,071,000 bushels is approximately 70 million bushels short of the 1948 crop. This fact places the North American production of 224,910,000 bushels for 1949 in a much stronger second position than a year ago. The two continents

—Photo by W. J. Morse

Coolies with drums of soybean oil at Dairen, Manchuria.

produced more than 97 percent of the world's total. Asia accounts for approximately 53 percent, while North America's share is slightly more than 44 percent of which Canada accounts for about 1.1 percent.

World trade in soybeans and soybean oil is difficult to estimate accurately because of lack of export statistics from Manuchuria, North Korea, the Soviet Union and its satellites. In prewar years Manchuria and North Korea supplied 90 percent of the soybeans entering world trade. Manchuria also exported oil. During the war, Japan took all the surplus from both these countries. As previously stated, if there are any exports from them today, it no doubt goes to the Soviet Union.

In 1949 only four countries reported foreign trade in soybeans and oil; of these four the United States

(See FLETCHER on page 28)

SOYBEANS: ACREAGE, YIELD PER ACRE, AND PRODUCTION IN SPECIFIED COUNTRIES, AVERAGE 1935-39, ANNUAL 1946-49 1/

Continent and country	Acreage 2/			Yield per acre			Production		
	Average 1935-39 1,000 acres	1948 1,000 acres	1949 3/ 1,000 acres	Average 1935-39 bushels	1948 bushels	1949 3/ bushels	Average 1935-39 1,000 bushels	1948 1,000 bushels	1949 3/ 1,000 bushels
North America									
Canada	4/ 10	94	104	20.7	19.4	25.1	4/ 207	1,824	2,605
United States 5/	3,042	10,430	9,912	18.5	21.4	22.4	56,167	223,006	222,305
Europe									
Bulgaria	34	—	—	12.1	—	—	416	—	—
Hungary	6/ 7	6	—	16.9	15.1	—	6/ 125	90	—
Italy	7/ —	5	3	12.1	21.9	18.3	4/ 1	107	52
Rumania	4/ 49	—	—	9.5	—	—	4/ 463	—	—
U.S.S.R.									
(Europe and Asia)	6/ 607	—	—	—	—	—	6/ 5,805	—	—
Asia									
Turkey	6/ 1	5	5	29.0	15.3	10.6	6/ 37	71	56
China proper (22 provinces)	8/12,411	11,309	11,762	16.7	18.6	15.2	8/207,666	210,820	179,200
Manchuria	8,992	—	5,500	16.8	—	12.0	151,294	—	66,000
Japan	4/ 812	584	648	15.4	13.8	13.7	12,499	8,085	8,892
Taiwan	4/ 17	—	—	8.9	—	—	4/ 151	—	—
Korea 9/	4/ 1,921	487	658	10.0	10.1	10.0	17,654	4,924	6,654
Indonesia 10/	889	900	712	10.9	10.5	10.2	9,731	9,406	7,275
Africa									
Tanganyika	—	—	—	—	—	—	—	97	36
Union of South Africa	11/ 13	11/ 15	—	5.0	5.3	—	—	67	80
World total 12/	29,100	31,650	31,100	—	—	—	464,300	562,200	507,100

1/Years shown refer to years of harvest. Southern Hemisphere crops which are harvested in the early part of the year are combined with those of the Northern Hemisphere harvested in the latter part of the same year. 2/Figures refer to harvested areas as far as possible. 3/Preliminary. 4/Average of less than 5 years. 5/Acreage harvested for beans. 6/One year only. 7/Less than 500 acres. 8/partly estimated. 9/Beginning with 1946 figures represent South Korea only. 10/Java and Mandura. 11/Planted acreage. 12/Includes estimates for the above countries for which data are not available and for minor producing countries.

Office of Foreign Agricultural Relations, USDA. Prepared or estimated on basis of official statistics of foreign governments, reports of United States foreign service officers, results of office research or other information. Prewar estimates for countries having changed boundaries have been adjusted to conform to present boundaries, except as noted.

Selling bread in the central square in the old city of Frankfurt.

Report from Germany

By R. G. BRIERLEY

Assistant Vice President Archer-Daniels-Midland Co., Minneapolis, Minn.

LOW COST PROTEIN is still the major food deficiency in Western Germany. Small percentages of soy flour in German bread could solve this problem with no increased cost to the consumer or change in national food habits. Substantial amounts of ECA food dollars for Western Germany would be saved by the American taxpayer. At the same time there would be a new market for 100,000 tons per year of American soy flour.

The foregoing is a summary of the findings of Ken Shuman of the Glidden Co. and the Soya Food Research Council, and myself, after a tour of Germany at the invitation of the German Food Ministry. We had been asked to further investigate in Germany the recommendations of the ECA technical assistance team of Strayer and Cartter who had suggested that a major contribution could be made by the addition of soy flour to German bread and meat products.

For four intensive weeks we studied the protein food problem in Germany. We traveled over 3,000 miles by car, participated in group meetings of bakers, millers, nutritionists, government officials, cooperatives, consumer and union organizations and representatives of various Allied food manufacturers. Over 300 key food leaders of Western Germany were conferred with during these meetings and in many individual discussions. We carried the good will and the soybean food technology of the United States to a country much in need.

We found Germany a sparkling facade under which lay a multitude of misery, cynicism, fear, and despair.

Everywhere there was an outward appearance of prosperity. Shop windows shouted with food and merchandise. Rebuilding of everything but residential homes was going on at rapid rate. Controls and rationing were a thing of the past. For a traveler with money, everything was procurable at prices which, when converted to dollar equivalents, were in line with American prices. Even luxury foods such as oranges and bananas, nonexistent a year ago, were in evidence everywhere.

Looking through this surface prosperity, we found quite a different picture, one that the American soybean farmer and processor should know in forming judgment on the future market possibilities for American soybean materials in Europe.

Millions out of Work

First, we found approximately 15 million people out of the 50 million population in Western Germany either unemployed, displaced or without retirement incomes, or otherwise financially incapable of getting more than essentially carbohydrate foods as a regular diet.

Second, prices of protein foods were terribly high when considered in light of average income. In one of Western Germany's largest cities there was an adequate supply of per capita protein foods, but during the month before our arrival there had been only 50 percent consumption. This was entirely because of inadequate incomes. While prices were in line with American prices, incomes were roughly 20 percent of the average American income. German experts estimate that high quality animal proteins are available regularly to only 15 percent of the population. Another 35 percent are borderline in their ability to regularly purchase protein foods, while 50 percent find such foods much beyond their budget.

Third, we found that the protein available to the average population was coming primarily from cereal sources. The total meat protein available in Germany averaged 25 kilos per person per year against prewar figures of 48 kilos per person per year.

Fourth, we found that even though there was no actual rationing, money had become the rationing system. The few fortunate were living well but the average person was still on a very inadequate diet.

In our many meetings with the German Food Ministry and ECA people in Germany, we were informed that they realized this apparent ready availability of food in general

Retail bakery in Hanover, Germany.

Brierley and C. K. Shuman of the Glidden Co. visited Germany on invitation of the German Foods Ministry.

could not long exist. We were asked to investigate and prepare the way technically for the use of soy protein in the German dietary. Why soy protein? Because it had been proven over and over again to be the cheapest and most readily available high quality protein food in sight.

Our technical investigation started with the premise that the introduction of any new ingredient into the human dietary, if it were to be effective, must be accomplished in a manner that would not alter existing food habits and in a form that had consumer appeal.

Use in Bread

It was decided to first study the inclusion of soy flour in German bread. Here could be made the greatest nutritional contribution to the average diet, because of the extremely high consumption of cereal products in the form of bread by most of the population of Western Germany. The primary problem studied was whether soy flour could be used in German bread without changing it so that its consumption would change existing food habits or have less consumer appeal.

Large scale feeding tests conducted in the United States had shown that 6 percent of soy flour could be added to American white bread without any taste fatigue or impairment of the average daily bread consumption. Even though German bread was unlike American white bread, it seemed logical to assume that a smaller percentage, such as 3 percent, could well be used in Germany. Tests were run, therefore, in several bakeries, technical bread laboratories, and flour milling test bakeries. Scoring of bread including 3 percent of soy flour combined with various German wheat flours indicated by the opinion of numerous observers, both expert and amateur, that such additions could be made without changing the bread and without adversely affecting consumer appeal. Supplementary tests are now being run in several approved establishments in Germany to further confirm this finding.

Our next approach was to the ways and means of actually getting 3 percent of soy flour into the German bread. Because there was an over supply of German dried milk powder, we also investigated the possibilities of adding milk powder along with soy flour.

There were an estimated 30,000 small bakers in Western Germany. The educational program involved in having them add 3 percent of soy flour and/or milk powder and the distribution problem of getting them supplies was staggering. It was decided, therefore, to approach the flour millers with the idea of having them mix the soy flour and milk powder with wheat flour at controlled levels in their mills. The German flour mills, which service the majority of the bakers in Western Germany, were well equipped to control the admixture on an economical basis. As we left Germany, the Food Ministry was working with these German millers on the program and the millers indicated that they were willing to cooperate.

It was decided that such a plan would require a revision in flour standards or a creation of a new standard flour terminology to designate wheat flour to which 3 percent of soy flour and/or milk solids had been added. Our discussion with food authorities indicated that such a standard might well incorporate a terminology which would compare to the meaning of the American term "Enriched Flour."

The next consideration was the economic aspects of the inclusion of soy flour in wheat flour for subsequent use in bread. The world market price of soy flour was less than wheat flour. While we were in Germany, however, local subsidies on wheat flour changed this relationship. There is every prospect now, however, that by July 1st these subsidies on wheat flour will be dropped and the natural world market price relationship between soy flour and wheat flour will be restored. This will make soy flour an item that could be substituted in the ECA program for more expensive protein foods at a considerable saving to the American taxpayer. It isn't often that money can be saved by giving a population better nutrition, but this would be the case with the addition of soy flour to German bread.

U. S. Market

The final major consideration is how this will all affect the market for American soybean products. If the recommendations of this mission are put into effect, a new market for 100,000 tons of American soy flour will be opened up. It will be American soy flour for the time being, because the German soybean mills are in no way equipped to make edible products.

This potential market is not going to be realized easily. By holding these meetings in Germany and showing movie films and colored slides of American soya utilization, we were able to go a long way in selling the soy program to Germany. The job isn't done by any means, however. There must be intelligent continued selling to put the program into effect.

(See BRIERLEY page 43)

Open air food market in central square of old University town in Black Forest Section of Southern Germany.

Growing Season off to Favorable Start

With the soybean planting season now well under way, most reporters for the Soybean Digest remain of the opinion that acreage will increase in their respective areas.

Correspondents continue somewhat conservative, however. Most place their estimates at from 10 to 20 percent more soybean acres than in 1949.

Planting season has continued to be retarded in most sections. However, soybeans are going into the ground earlier than normal in some places, due to the fact that they are being planted ahead of corn and other crops.

Reports of Soybean Digest correspondents follow:

Alabama

H. I. West, Bay Minette, for Gulf Coast, Escambia, Baldwin and Mobile counties (May 25): Planting date normal. 35% of crop planted. Weather conditions good. Acreage increase 20% over 1949. Baldwin County limited to available acres used as a second crop. 50% of crop land will be in beans. Mobile County will have about 10%, Escambia County the same. 85,000 acres in this area in beans.

Arkansas

Keith Bilbrey, county agent, Blytheville, for Mississippi County (May 25): 20% of crop will be planted late, 85% by June 1. Very bad planting season. I think we will have 75,000 acres more soybeans this year. Cotton acreage control will force county to plant about 90,000 less acres of cotton. Will be more S-100s.

L. M. Humphrey, R. L. Dortch Seed Farms, Scott, for Little Rock area (May 24): Planting date a little later than normal due to a lot of cotton replanting. About 60% planted by June 1. Probably about 30% increase in soybean acreage to replace lost cotton acreage. Will be fewer Arksoys, increase in Dortchsoys and S-100.

Florida

E. N. Stephens, county agent, Pensacola, for Escambia County (May 25): Planting date normal. Weather conditions good. 40% of crop planted by June 1. 20% increase in soybean acreage due to diversion from cotton and possibility of soybean quotas in 1951.

Illinois

Russell S. Davis, Clayton, for west central (May 25): Beans are being planted while waiting corn borer date to come. Looks now like bulk of crop will be planted by June 1. Plenty of moisture underneath but some fields have cloddy seedbeds. A good shower by June 1 will give good start. Quite sure acreage will be higher than 1949. Most of withheld corn acreage will go to beans. Some winterkilled wheat fields being plowed for beans. Recent spurt in bean market gave growers "shot in arm." Until recently most growers felt there would be too many beans this fall.

J. E. Johnson, Champaign, for Champaign and adjoining counties (May 25): Average 1950 planting will be week to 10 days earlier than normal. A matter of weather and of planting soybeans before corn, and an apparent desire to plant both beans and corn earlier. Farmers taking advantage of this favorable situation for planting. My personal opinion is a minimum acreage increase of 15% for this territory. May run slightly higher. Some corn acreage taken up with popcorn. Will be an increase in Hawkeye. A small acreage of Adams. Consistent grower stays with the Lincoln, one of very best all-around varieties.

Walter W. McLaughlin, Decatur, for vicinity (May 29): Planting about normal. 75% of crop in June 1. Have had nice rains to make seedbed excellent for beans not planted. 10% increase in acreage, affected by corn allotments and poor stands of old clover. Big increase in Hawkeye.

Robert W. Weitzer, Valley Farms Co., St. Louis, Mo., for west central Illinois (May 27): Bean planting somewhat ahead of last year due to delayed corn planting. Over 50% planted. Soil moisture sufficient to bring beans up in few days. Acreage 150% of 1949. Most doubtful stands of wheat being planted to beans. Adams and Cypress No. 1 being planted. Decrease in Lincolns as replaced by Wabash and Hawkeye.

Indiana

K. E. Beeson, extension agronomist, Purdue University, Lafayette, Ind. (May 24): If rains continue beyond present date much of crop will be planted after June 1. State acreage increase up 10% at least compared to 1949. Delays in planting corn are always factor in influencing soybean acreage. A higher percentage of state acreage will be in Hawkeye and Wabash.

J. B. Edmonson, Danville, for south central (May 25): Planting date 5 days later than normal. Farmers deliberately holding back, believing that later beans are best bet. 50% of crop planted. Weather somewhat on dry order, but generally conditions have been ideal. Fields cloddy but recent rains and heavy tillage machinery solving problem. Acreage probably 5-10% more than 1949. Many farmers paid little attention to corn allotments. Rather extensive clover and alfalfa failures have increased soybean acreage. Recent bean prices stimulating. Lincoln heavy favorite with Hawkeyes in demand in many areas such as black ground and river bottoms.

Chester B. Biddle, Remington, for northwestern (May 24): Some planting earlier than usual. 80% planted by June 1. Very dry seedbed deferred planting. Recent rains very beneficial. Beans going in under excellent planting conditions. Temperature optimum. Not over 10% increase in soybean acreage. May be a few more acres of Hawkeyes.

S. D. Hollett, Swift & Co., Frankfort, for central (May 23): Planting date about 10 days early. 60% to 70% planted June 1. Weather conditions excellent for planting. 20% increase in acreage, influenced by corn acreage allotment program and decreased oat acreage. Increase in Hawkeyes but Lincolns still more prevalent.

Ersel Walley, Walley Agricultural Service, Fort Wayne, for northwest Ohio and northeast Indiana (May 26): Planting normal to 5 days earlier than normal. 90-95% will be planted by June 1. Top soil needs moisture in some localities. Acreage 5-10% above 1949. Rise in corn price increased corn acreage and thus held down soybean acreage. Varieties mostly Lincoln and Hawkeye.

Peter J. Lux, Indiana PMA state committee, Indianapolis (May 26): Planting 5 days earlier than normal. 65% will be planted June 1. Acreage 12% higher than 1949, affected by corn acreage allotments and

drowning out of wheat. Beans went into ground in better shape than I have ever known. About 40% of those planted are up and a very good stand.

Iowa

Leslie M. Carl, U. S. Department of Agriculture, Des Moines (May 23): About 50% of crop planted by June 1. Acreage 20% increased over 1949. Corn acreage will be reduced about 10-13% from 1949 and soybeans will take part of this reduction.

Otto G. Brandau, Rudd, for northeast (May 24): Planting date 10 days later than normal. 80% planted June 1. Weather wet and cool. 15% more soybeans than 1949. Shift from corn to beans. More demand for Hawkeyes.

O. N. LaFollette, State Department of Agriculture, Des Moines (May 23): Average planting date near normal. Delay in some areas. Weather mostly favorable. Acreage up 16% to 18% from 1949. Corn acreage restrictions and spring hazards affecting oats acreage increase acres to beans. Trend to newest varieties available.

Howard L. Roach, Plainfield, for northeast (May 23): Planting date 10 days later than normal. Corn 85% planted June 1, soybeans 50%. Weather conditions good. Acreage 10% up as compared to 1949. Delay in corn planting will shift acreage to beans. More Hawkeyes than last year.

Robert R. Kalton, farm crops department, Iowa State College, Ames (May 25): Planting date probably averages week late. Beans already up in some areas. In others land yet to be worked. 50% to 75% will be planted June 1. Rains delaying planting and land preparation. Moisture ample, too much in some areas. Temperatures below normal, especially in northern Iowa. Acreage increase as compared to 1949 may be anywhere from 20% to 40%. Still hard to tell because of late season in certain important soybean producing areas. Wet, late season may favor additional soybean acreage. Some oat seedings failed and will go to soybeans, probably. Soybean price outlook still favorable. More Hawkeyes, less Lincoln. Small acreage to Adams.

John Sand, Marcus, for northwest (May 27): Planting a short week later than normal. Practically all in June 1. Seedbeds very nice shape. Estimate 15% increase in acreage. More Hawkeyes.

Fred Hawthorn, Castana, for western (May 26): Planting week late. 75% will be planted June 1. Moisture about normal now. 10% increase in acreage. Corn allotments, flooding on Missouri bottom, rise in bean price caused increase. More Hawkeyes.

Kansas

A. G. Thomson, Hiawatha, for northeastern (May 25): Starting to plant. Some fields planted. 80% will be planted June 1. Green bugs have taken 80% of red clover. Wind has cut about 60% of oats acreage. Beans are replacing these lost crops about 30%. Acreage up 200% as compared with 1949. Some Hawkeyes planted and a few Wabash.

H. L. Collins, agricultural statistician, Topeka (May 26): Possibly some planting delay from wet fields. Dry weather hindered seeding of oats and caused shift to soybeans as well as reduction in corn acreage. Moisture adequate. 20% to 30% increase in acreage.

Kentucky

G. W. Allen, manager Ohio Valley Soybean Cooperative, Henderson, for area (May 24): Planting date 1 week late. 30% will be planted June 1. Excessive rains, especially early. Acreage 20% up compared to 1949, affected by corn allotments. Decided trend to Wabash.

Louisiana

W. M. Scott, Tallulah, for Louisiana Delta section (May 27): Planting date normal. Weather good since Apr. 1. Acreage 20% above 1949. 25% to 33⅓% of acreage lost to cotton will be planted in soybeans. Varieties will be S-100, Ogden, Volstate.

Minnesota

Clive F. Marshall, Honeymead Products Co., Mankato, for southern section (May 23): Planting date 10 days later than last year. 15% planted to date. Weather conditions good last few days. Good rains and 75 degree temperature. Acreage 57% greater than 1949 for state. Might be higher due to late planting of oats and barley north of here. New growing areas will be developed this year. Quite a few Capitols from Canada. Hawkeyes did not do so well last year.

Howard E. Grow, Faribault, for south central (May 24): Planting date 7 to 10 days late. All operations delayed from 1 to 3 weeks because of unfavorable weather, mostly intermittent rains. Acreage in-

Monmouth, Ill., Processing Plant

You see the soybean processing plant (lower left) and storage facilities of Ralph Wells & Co. at Monmouth, Ill. Wells also has storage facilities at North Henderson, Cameron and Gerlaw, Ill.

crease 25% to 40% due to lateness of season and compliance with acreage control for corn. Considerable acreage being seeded to Monroe.

R. E. Hodgson, Waseca, for southeast (May 29): Planting 7 to 14 days late. Some even later. My guess is 80% of crop planted by June 1. Soil works up well, plenty of moisture to start. Acreage 20% more than 1949, due to late spring and corn limitation. Monroe variety coming in. Some Lincoln and Hawkeye used.

John W. Evans, Montevideo, for southwest central (May 28): Planting 10 days late on average. 20% planted by June 1. Weather cold and wet all spring but more favorable now. Acreage 25% more than 1949 due to corn acreage shift, delayed grain seeding and wet ground. Monroe being planted where available.

Missouri

A. F. Stephens, Gulf, Mobile & Ohio Railroad, for central Illinois and east central Missouri (May 26): Planting date 10 days late. 65% of crop planted in Missouri, 40% in Illinois June 1. Weather dry. 20% increase in soybean acreage over 1949, affected by corn allotments, decreased oat acreage, winter damage to wheat.

Carver Brown, Laddonia, for northeast (May 25): Planting 10 days earlier than normal. 90% will be planted by June 1. Weather very favorable for preparing ground, planting crop and starting it off. 10% acreage increase affected by corn allotments and corn borers. Varieties mostly Chiefs and Lincolns. A few Wabash.

Nebraska

Henry Wolfe, extension agronomist, Lincoln, for eastern one-third (May 25): Except for northeast, planting more advanced than 1949. 25% will be planted June 1. Moisture is good. Weather has been excellent for land preparation. At present cold, wet weather is delaying planting. Will be an increase in acreage which will take care of 30% decrease of last year. Farm program and present price of soybeans affecting acreage change. Some seed of Adams may be planted.

Donald G. Hanway, assistant agronomist, University of Nebraska (May 24): Planting date will be normal in some areas but later in others. Much corn in east central and northeastern remains to be planted. All crops somewhat late. Acreage probably 125% or more of 1949. Acreage controls on corn account for some increase. In areas where oats are doing poorly, farmers are considering plowing them up. This may add to soybean acreage. Hawkeye replacing much of Richland previously grown.

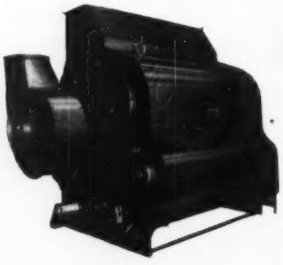
Harry E. Wiysel, Fremont Cake & Meal Co., Fremont, for eastern (May 29): Planting about normal date. 75% planted by June 1. Too wet for field work since May 25. About 30% increase in acreage. About 65% of beans in this area will be Hawkeye. Balance mostly Lincoln.

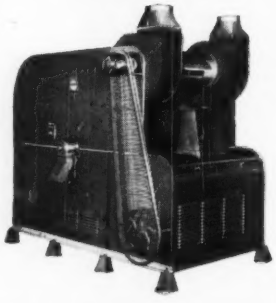
North Carolina

H. V. Latham, Latham Seed & Equipment Co., Belhaven, for eastern (May 25): Planting 10 days late. Some early plantings replanted due to heavy rains packing soil. 95% in June 1. Acreage approximately same as 1949. 95% of acreage in Ogdens.

Farmville Oil & Fertilizer Co., Farmville, for eastern (May 25): Planting date normal. All crops will be planted June 1. Weather

For High Capacity SCALPING and ASPIRATING SOYBEANS





The Carter SCALPERATOR

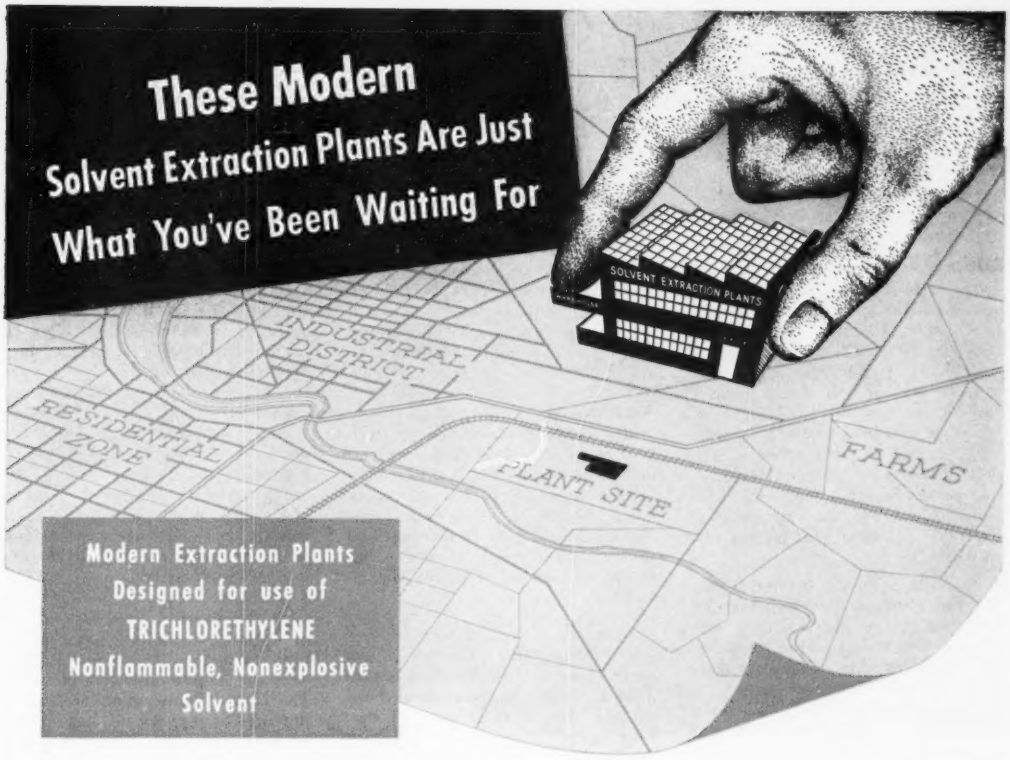
In the initial cleaning of soybeans, the Carter Scalperator provides efficient scalping and aspirating of beans going directly to storage, removing both coarse and light foreign materials. Special controls are available by which the volume of beans handled can be coordinated with the volume required for drying. This operation ahead of dryers is an important protection against fire. The all-metal machine is entirely rotary in motion, to eliminate vibration. Power requirements are low. Sizes to fit YOUR capacity needs are available.

The Carter MILLERATOR

The Carter Millerator efficiently screens and aspirates soybeans before processing. The upper screen performs a refined scalping, removing material larger in diameter than the beans handled, and much of the material substantially longer. The lower screen removes small seeds and sand, and can be used to remove splits. Controlled aspiration effectively removes light foreign materials. The machine is all-metal, easy to control, uses very little power. Write for complete information on the MILLERATOR and SCALPERATOR.

HART-CARTER COMPANY

659 Nineteenth Avenue N. E. Minneapolis 18, Minnesota



THEY'RE HERE—ready to be designed and built to your requirements by competent, responsible manufacturers of extraction equipment. They're truly modern, because they are designed to make efficient, economical use of nonflammable, nonexplosive Trichlorethylene solvent. And you can get them for any capacity from 25 to 400 tons of soybeans processed per day.

Just think of the many advantages this new type of plant offers you. It's compact—needs very little space. You can locate anywhere . . . put up your plant right in the heart of a highly industrialized district. You don't have to put the plant in the great outdoors far way from where you do your business. You can keep your capital investment small because you don't need to make expensive provisions for grounding, safety barriers, fire fighting equipment and fire- and explosion-proof construction. You can cut your fire hazards to the minimum, and that will keep down your insurance rates. And best of all, you can now carry on a highly efficient extraction operation using a nonflammable, nonexplosive solvent.

So, for your next solvent extraction installation, whether it's a replacement or a new unit, pick one of these modern plants. And pick Du Pont Trichlorethylene for your nonflammable solvent. You'll get a stable, rapid penetrating solvent which can be recovered readily and almost completely for reuse. It distills completely in a very narrow boiling range and leaves no high boiling residues in extracted material. Deliveries can be made promptly and quickly anywhere, in tank cars or drums.

Why not find out more about what these new plants and Du Pont Trichlorethylene can do for you? Just clip and mail the coupon below—

Tune in "Cavalcade of America" Tuesday nights—NBC coast to coast

DU PONT
TRICHLORETHYLENE
FOR EXTRACTION
DU PONT
REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

CLIP THIS COUPON

E. I. du Pont de Nemours & Co. (Inc.)
Electrochemicals Dept., Wilmington 98, Delaware

Please send me more information on Du Pont Trichlorethylene for Extraction.

*Name*_____

*Position*_____

*Firm*_____

*Address*_____

conditions good. Acreage about same as 1949.

North Dakota

C. J. Heltemes, Fargo, (May 24): Most of acreage will be planted later than usual. Very heavy precipitation during May. Cold, wet weather has made it impossible to get planting done at usual dates. Acreage up as compared to 1949, affected by lateness of season.

Ohio

Calvin Heilman, Kenton, for Hardin, Wyandot and Marion Counties (May 24): Planting date average. 20% to 40% will be planted by June 1. Not over 5% increase in soybean acreage. Livestock feeders will not cut corn acreage. Some increase in meadows so little increase in beans. All usable acres in Kildeer already in beans. Hawkeyes increasing rapidly replacing Lincoln. Many are securing start of Monroe. Earlyana very largely discarded.

Soybean Johnson, Delphos Grain & Soya Products Co., Delphos, for northwest (May 24): Planting date about 2 to 3 weeks earlier than past 3 years. Probably 60% planted by June 1, more if we get rain as it looks. Weather too dry. 25% to 30% increase in soybean acreage as compared to 1949. Oats acreage 50% normal. Some cut in corn. Some wheat replanted to beans.

G. G. McIlroy, Irwin, for west central (May 24): Planting date 1 week earlier than normal. 95% of crop planted by June 1. Weather very good. 10% more soybean acreage this year. Some oats acreage was changed to soybeans due to necessity of planting oats too late. Also some corn reduction acres are going to beans. Today prospect for a good 1950 crop of soybeans excellent. 50% of planted crop will be showing above ground June 1. More Hawkeyes than last year.

Pennsylvania

E. L. Gasteiger, agricultural statistician, Harrisburg (May 25): Planting date 1 to 2 weeks late. Very little planted. Much rain and wet soils in southeast and central portions latter half of May delaying planting. Delayed planting of oats may increase soybean acreage slightly.

West Virginia

R. J. Friant, extension agronomist, Morgantown (May 24): Planting date 2-3 weeks late. 20% will be planted June 1. Cold wet soil has delayed planting of both corn and soybeans.

Wisconsin

Hilmer B. Schauer, Rt. 3, Hartford for southeast (May 25): Planting about 5 days late. Soil conditions adverse. Cool and dry up to now. Expect to have all beans planted June 1. More acreage than 1949, increase mostly for hay. Affected by freezing of clover and alfalfa.

John P. Dries, Saukville, for southwestern (May 28): 90% planted by June 1. Ideal moisture conditions. 20% increase of soybean acreage, due to curtailment of canning crops. Some soybeans going in for hay. Early varieties being sought.

Ontario

R. W. Peck, River Canard, Ontario, Canada, for southwestern Ontario (May 26): Some fields planted a few days earlier than normal due to fine dry weather. 50% planted by June 1, a few fields up. Very dry till May 25, then rain to give plenty of moisture with warm weather. 25% acreage increase. Poor weather for spring grain caused some increase and farmers like soybeans as crop due to ease of handling and good cash returns.

FLETCHER

(Continued from page 21)

is the principal exporter. During the period from January to October of 1949, United States exports reached 20.8 million bushels of beans and 150,000 tons of oil. In these 10 months, the total exports were equivalent to almost 55 million bushels of beans. This is just about equal to the total United States prewar production. Three-fourths of the oil and one-fifth of the beans went to Europe. Canada was our next best market for oil; Asia for beans. Canada also took well over 1.6 million bushels of beans while Asia, followed by South America and Africa, was our third best market for oil.

Other countries reporting small shipments of soybeans were China, Indonesia, and Turkey. While soybeans are not classified separately in Brazilian official statistics, reports indicate that 1949 shipments would probably exceed the 400,000 bushels shipped in 1948.

Germany, Austria, and France were the heaviest importers of oil in 1949, followed by other European countries. Japan and Canada were the largest importers of beans. The United States, once the leading importer of soybean oil, has imported none since 1941. In the period of years since then, we have become the world's leading exporter of both soybeans and soybean oil.

Statistically, there still exists an extreme world shortage of fats and oils, particularly in Europe and over most of the Far East. It appears that for some time to come there will be a gap between the needs of consuming countries and the available exportable surplus. However, though there is a big demand for fats and oils, the amount of United States soybeans and soybean oil that will enter foreign trade will depend entirely on government policies.

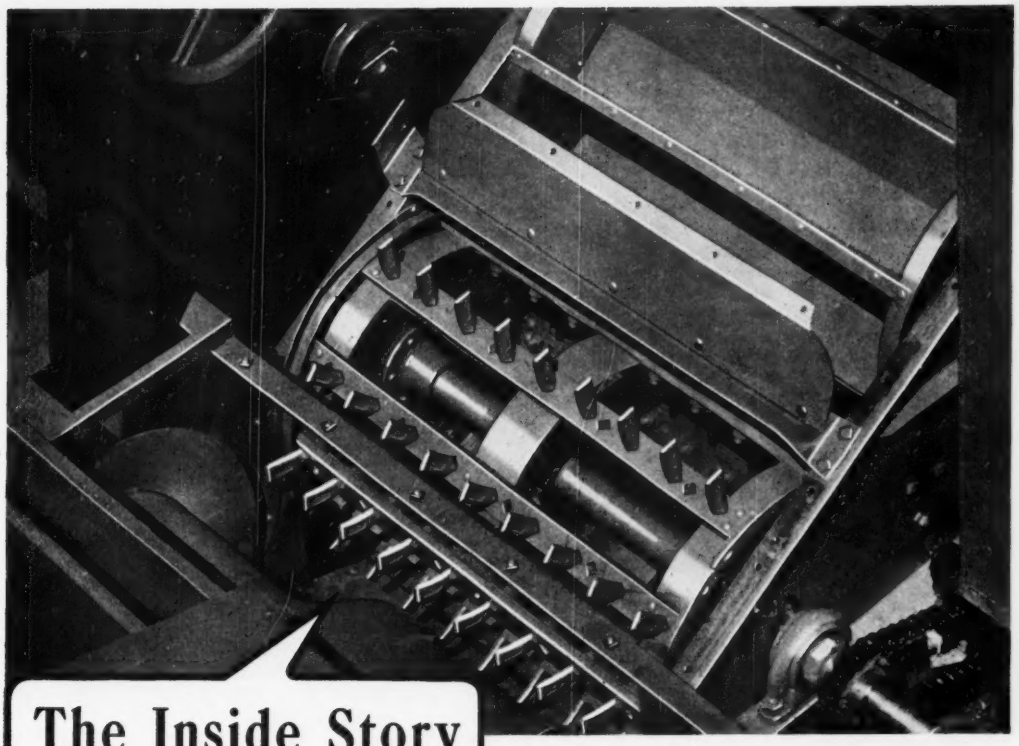
THE NELLIS FEED CO.

Brokers of Soybean Oil Meal

Harrison 1801 TWX 144
555 Dwight Bldg.
Kansas City 6, Mo.

Wabash 2-7322 TWX 623
3832 Board of Trade Bldg.
Chicago 4, Ill.

Chestnut 1122 TWX 238
405 Merchants Exch.
St. Louis 2, Mo.



The Inside Story of Saving Soys

...with America's Favorite Combine

● More than a hundred years of experience have given many things to the Case Model "A" six-foot combine. One is a spike-tooth cylinder with threshing width expertly proportioned to the width of cut. Result is a volume of material not too thick nor yet too thin, but of favorable thickness for effective threshing without harsh action on tender seeds.

This versatile cylinder has simple adjustments for positive control of speed and clearance to suit the condition and kind of crop—not only soybeans and common grains, but the finest of tough-hulled grasses and seeds as big and brittle as lima beans. The concave gives choice of one, two, or more rows of teeth to fit the character of crop.

In quality of construction, too, the Case "A" is worthy of its hundred-year heritage. By its ENDURANCE as well as its performance, it holds highest respect among growers with wide experience in combine harvesting. For the full story, see your Case dealer. J. I. Case Co., Racine, Wis.

CASE

Publications

COMPARE DIFFERENT PROCESS MEALS

The comparative value of cottonseed meal prepared by hydraulic and solvent processes and soybean oil meal prepared by Expeller and solvent processes was determined in digestion and nitrogen balance trials with steers and lambs.

The meals were fed on an equivalent protein basis in amounts which furnished about 60 percent of the total nitrogen in maintenance rations of prairie hay and oil meal and about 28 percent of the total nitrogen in fattening rations of corn, prairie hay and oil meal. All rations contained about 10 percent of protein. Differences among the meals attributed to differences in processing were not evident in the results.

The digestibility of nutrients was higher in the soybean oil meal rations than in the cottonseed meal rations of similar type for both steers and lambs. The cottonseed meal rations and the corresponding soybean oil meal rations were of equal value, however, in promoting nitrogen retention. The protein of the low carbohydrate maintenance rations was poorly utilized.

THE COMPARATIVE VALUE OF HYDRAULIC, EXPELLER AND SOLVENT OIL MEALS IN MAINTENANCE AND FATTENING RATIONS FOR RUMINANTS. Willis D. Gallup, H. M. Briggs, and E. E. Hatfield, Oklahoma Agricultural Experiment Station, Stillwater, Okla.

Soy Meal Protein

Studies were made at Cornell University on the effects of protein from whole egg and from soybean oil meal on the nitrogen retention and growth of pigs.

When fed at a 10-percent level of protein the protein from soybean oil meal was less efficiently retained by growing pigs and had a significantly lower biological value than whole egg protein. But the addition of methionine to equal the amount in the whole egg made the soybean oil meal protein equal to the egg protein.

The inclusion of a small percentage of whole egg protein in the methionine - supplemented soybean oil meal diet did not further enhance the value of the protein.

EFFECT OF METHIONINE SUPPLEMENTATION OF A SOYBEAN OIL MEAL-PURIFIED RATION FOR GROWING PIGS. By J. Milton Bell, Harold H. Williams and J. K. Loosli, Cornell University, Ithaca, N. Y. Journal of Nutrition, Philadelphia, Pa. Apr. 10, 1950.

Meal Supplements

Experiments have been conducted at the Illinois Experiment Station on the supplementary effect of certain feeds and nutrients when added to a ration composed of corn and soybean oil meal fortified with minerals and vitamins A and D.

A 20-percent protein ration composed largely of corn and soybean oil meal was nutritionally inadequate for weanling pigs in dry lot.

The addition of either 1.5 mg. riboflavin, 6 mg. pantothenic acid or 250 mg. choline chloride per pound of ration significantly increased the average daily gains. But neither thiamine, niacin nor pyrodoxine as additions to the basal ration had a significant effect on the rate of gain.

When the basal ration included five B-vitamins, the addition of either 250 mg. choline chloride per pound of ration or 2 percent dl-methionine or a combination of both very significantly increased the growth rates.

When the basal ration included six B-vitamins, the addition of either 5 percent meat scraps or 2 percent dried whey products with whey fermentation solubles increased the average daily gains, although not significantly.

KNOWN AND UNIDENTIFIED FACTORS SUPPLEMENT A CORN-SOYBEAN MEAL RATION FOR WEANLING PIGS IN DRYLOT. By I. A. Dyer, J. L. Krider and W. E. Carroll, University of Illinois. Journal of Animal Science, Menasha, Wis. Nov. 1949.

Vitamins Added

Weanling 24-pound pigs were self-fed a basal ration of corn, oats, screw press soybean oil meal, meat scraps, alfalfa meal and complex mineral mixture on concrete floors in a Michigan experiment.

Calcium pantothenate, riboflavin and nicotinic acid when added to the basal ration brought about a significant increase in daily gains, prevented the occurrence of deficiency symptoms and reduced the feed requirement per unit of gain by 22 to 25 percent.

In two trials supplements of thiamine, pyridoxine and choline failed to further increase gains or lower the feed requirements. In one trial, vitamin B_{12} concentrate also failed to increase gains and efficiency above the increase due to the supplement

WILBUR-ELLIS COMPANY

BROKERS OF SOYBEAN OIL AND PROTEINS

Complete Domestic and Foreign Coverage

105 West Adams St., Chicago, Ill.

Telephone: ANDOVER 3-7107

New York **San Francisco** **Buffalo** **Los Angeles** **Seattle**

Ford Model F-5 stake shown is one of over 175 models in the Ford Truck line for '50.

"Strong? You bet—and Ford's strong on economy, too!"

says Paul H. Kuhl of Flemington, N. J.

"We buy Ford Trucks because first cost is low and because they save in lots of ways," says Mr. Kuhl who runs a 175-acre farm and is president of the Kuhl Poultry Equipment Co. "Gas, oil and repair savings, we can prove by our books. Ford performance and reliability save time and worry."

"To pull up steep inclines and across fields takes real truck power—the kind we get in Ford—the kind that moves big loads in a hurry." *Only Ford gives you a choice of V-8 or Six, four Engines for over 175 Models, 95 horsepower to 145 horsepower.*

"Our Fords start every time," Kuhl tells Ford Dealer Emory Parker. "No matter what the weather we're never late starting—never miss a trip or a load." *Ford Short-Reach Manifolds, Efficient Carburetion and Loadomatic Ignition give more reliable starting.*

"It's an all-around saver! Our Fords save all kinds of work on the farm. And they save money hauling poultry equipment and wire products for the store." *Loadomatic Ignition and light Aluminum Alloy Pistons save gas, Demountable Brake Drums save repairs.*

"We figure Ford Trucks cost less in every way. They're priced right to begin with and they cost less in the long run." *Farmers everywhere are switching to Ford because Ford Trucks do more per dollar. Ford is making the truck industry's biggest sales gains!*

Ford Trucking Costs Less Because—

FORD TRUCKS LAST LONGER

Using latest registration data on 6,592,000 trucks, life insurance experts prove Ford Trucks last longer!

of pantothenic acid, nicotinic acid and riboflavin.

It is concluded that the rations used were deficient in pantothenic acid, nicotinic acid and riboflavin under the conditions of these trials and that liberal supplementation of these vitamins overcame the deficiency.

THE EFFECT OF LIBERAL B-VITAMIN SUPPLEMENTATION ON GROWTH OF WEANLING PIGS FED RATIONS CONTAINING A VARIETY OF FEEDSTUFFS. By W. N. McMillen, R. W. Luecke and F. Thorp, Jr., Michigan Agricultural Experiment Station. Journal of Animal Science, Nov. 1949. Menasha, Wis.

Enlarged Hocks

Male turkeys often develop abnormal hocks, especially under confined conditions.

It was observed that poults fed diets deficient in animal protein developed enlarged hock joints, in studies on the animal protein factor at Cornell University. As a result, workers designed experiments to determine if glycine, choline, betaine and vitamin B_{12}, in any of various combinations, were effective in the prevention of this condition, known as perosis.

Basal diets were used that contained soybean oil meal but which were deficient in or lacking in animal protein.

Results emphasize the importance of choline in the prevention of perosis in turkeys. In no instance was perosis completely prevented so long as the choline level in the diet was below 850 mg per pound.

When animal protein was omitted from the diet, choline was ineffective in completely preventing perosis unless the diet also contained betaine or a relatively high level of glycine and vitamin B_{12}.

STUDIES ON THE ENLARGED HOCK DISORDER (PEROSIS) IN TURKEYS. By M. L. Scott, Cornell University, Ithaca, N. Y. Journal of Nutrition, Philadelphia, Pa. Apr. 10, 1950.

Protein Level

A ration containing 20 to 21 percent protein will support an excellent rate of growth in chicks if the amino acid balance and the supply of all other nutrients in the ration is adequate.

During the first 3 weeks of life chicks receiving 28 percent protein do utilize their feed more efficiently than those receiving the 20-percent-protein ration. But it would seem inadvisable for feed concerns to manufacture a special high protein ration for starting chicks since the difference in feed efficiency is not great and no increase in growth may be expected.

THE EFFECT OF PROTEIN LEVEL ON GROWTH AND EFFICIENCY OF FEED UTILIZATION. By Edwin P. Singsen, poultry department, Storrs Agricultural Experiment Station, Storrs, Conn. Poultry Science, Sept. 1949, 450 Ahnaip St., Menasha, Wis.

Miscellaneous

AGRICULTURAL AND INDUSTRIAL SURVEY OF MISSOURI. Compiled by Ernest L. Little, Columbus 1, Ohio, for Missouri Chemurgic Council. Published by Missouri Division of Resources and Development.

Contains a section on soybeans in Missouri and a chart showing utilization of soybean products.

ANNUAL REVIEW OF LITERATURE ON FATS, OILS AND SOAPS, PART I. By M. M. Piskur, Swift & Co., Chicago. Journal of the American Oil Chemists' Society, 35 E. Wacker Drive, Chicago 1, Ill.

THE *IN VITRO* DIGESTIBILITY OF RAW AND HEAT-PROCESSED SOY PRODUCTS VARYING IN THE NUTRITIVE VALUE OF THE PROTEIN. By Morris Simon, Quartermaster Food and Container Institute for the Armed Forces, and Daniel Melnick, Best Foods, Inc. Cereal Chemistry, Lincoln, Nebr., Mar. 1950.

SOME PROPERTIES AND USES OF HIGH IODINE FALKIDINE DRYING OILS. By Samuel S. Gutkin, vice president and technical director, Falk & Co., Paint, Oil and Chemical Review, Chicago, Ill. Mar. 30, 1950. Also American Paint Journal, St. Louis, Mo. Apr. 3, 1950.

RELATION OF THE AMINO ACID-SUGAR REACTION TO THE NUTRITIVE VALUE OF PROTEIN HYDROLYSATES. By Leo Friedman and O. L. Kline, U. S. Food and Drug Administration, Washington, D. C. Journal of Nutrition, Philadelphia, Pa. Feb. 10, 1950.

EFFECT OF ANIMAL PROTEIN FACTOR SUPPLEMENT, B_{12}, METHIONINE, AND SOIL ON CORN RATIONS SUPPLEMENTED WITH PEANUT, SOYBEAN AND FISH MEALS. By T. J. Cunha, J. E. Burnside, H. H. Hopper, A. M. Pearson and R. S. Glasscock, University of Florida, Gainesville, Fla.

The addition of APF supplement to corn-peanut meal and corn-soybean oil meal rations for pigs resulted in gains similar to those on a corn-fish meal ration.

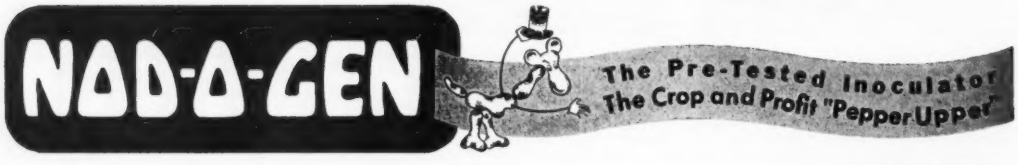
THOUSANDS OF DEALERS SELL **PRE-TESTED NOD-O-GEN**

and the list continues to grow year after year. There must be a reason.

FARM LABORATORY DIVISION

THE ALBERT DICKINSON CO., CHICAGO 90, ILLINOIS, P. O. BOX 788

SOUTHERN OFFICE AND WAREHOUSE: Jackson, Mississippi Founded 1854



"That's like processing without

PENOLA HEXANE!"

SPECIFY PENOLA HEXANE — for more efficient, more economical processing. You get *all 8* of these important advantages when you use Penola Hexane. Purity • Stability • Balanced solvency • Lower vapor pressure • Narrow boiling range • Special handling • Immediate availability • Technical assistance by experts

For Information and Assistance—Call our office nearest you for any technical data you may need regarding your processing operations.

PENOLA INC.

NEW YORK CHICAGO DETROIT ST. LOUIS

Penola

GRITS and FLAKES... FROM THE WORLD OF SOY

Arnold W. Klemme, soil specialist of the agricultural extension service, Columbia, Mo., was given a superior service award by the U. S. Department of Agriculture May 25 for "his work which has had a profound influence on the farm population in Missouri to practice soil management and conservation."

* * * *

Fifty Years in the Life of a Community is title of a booklet containing pictures and story of the community of Bemis, Tenn., and the Bemis Brothers Bag Co., put out by the company in connection with its golden jubilee celebration.

* * * *

Among the 20 California food manufacturers and packers who have been cited by the Food & Drug Service, Inc., for consistent achievement in plant sanitation was Oriental Foods, Inc., Los Angeles, packers of Jan-U-Wine Soy Sauce.

* * * *

Convair Corp., Pittsburgh, Pa., has issued a new brochure on the Convair Pneumatic conveying systems. Ask for bulletin No. 103.

* * * *

Little Asa, American Soybean Association's character, is featured in the May issue of Pacific Coast Review along with an article, "Soybean Provides Many Nutritious Foods" by Kent Pellett, managing editor of the Soybean Digest.

* * * *

"Piping's a Major Part of Soy Oil Extraction Plant," is title of an article by George Holman in May Heating, Piping and Air Conditioning, Chicago. Article deals with the piping and other equipment features of the new Spencer Kellogg & Sons solvent plant at Decatur, Ill.

* * * *

Mrs. Ellen Semrow has been appointed director of the consumer service department of the National Association of Margarine Manufacturers, with headquarters at Chicago. She was formerly assistant manager of the Hotpoint Institute, Hotpoint, Inc., Chicago.

* * * *

W. H. Goss, associate director of research for Pillsbury Mills, Inc., Minneapolis, was elected member-at-large at the 41st annual meeting of the American Oil Chemists' Society held recently at Atlanta, Ga.

* * * *

William O. Murray of the soybean unloading department of the Archer-Daniels-Midland Co., Chicago oil mill recently received an award for his suggestion that an automatic signaling device be installed at the end of the soybean conveyor to aid plant production.

* * * *

Bulletin 10-C illustrating and describing the Simplex "500" Pellet Mill may be obtained from Sprout, Waldron & Co., Muncy, Pa.

* * * *

Floyd Bates has been made manager of the Rose City Oil Mill, Little Rock, Ark., succeeding C. W. Knowles, who passed away recently.

* * * *

Promotion of J. E. Drew to director of public relations and G. F. Gamber to director of personnel of Lever Bros. Co., New York, was announced recently by that firm.

* * * *

Federal supervisors and licensed grain inspectors of the USDA, who gathered at Chicago recently for a nationwide conference, were guests of the Seedburo Equipment Co., Chicago, at a reception.

* * * *

"Solution for Surplus?" is title of an article on Wheeler McMillen, the National Farm Chemurgic Council and the philosophy behind it in May 1 Forbes Magazine. McMillen's picture appears on the cover.

* * * *

Bernard J. O'Dowd, independent broker and soybean specialist, is now associated with Goffe & Carkener, Inc., at Kansas City. In his new connection O'Dowd will engage in the general grain merchandising business.

DIXIE CO. SOLD

ELMER W. NOXON

The Dixie Machinery Manufacturing Co., 4200 Goodfellow Blvd., St. Louis 20, Mo., has announced the purchase of all of its capital stock by the Pennsylvania Crusher Co., Philadelphia, Pa., a division of the Bath Iron Works Corp.

Elmer W. Noxon, former president of the Dixie Co., and now acting manager, has announced that Dixie will retain its identity, and continue to produce Dixie Feedmills in its St. Louis plant. A complete stock of needed replacement parts will be maintained for the convenience of customers.

According to Noxon, the close working alliance with the Pennsylvania Crusher Co. will lead to better products and broader service for users of "Dixie Hammermills," as well as to make available a wider selection of hammermill designs.

—s b d—

FILTER PAPER CHANGE

Filter Paper Co., Chicago, Ill., manufacturer of filtering materials and liquid handling equipment, announces that Charles Miller, general manager and co-owner of the Company, has become sole owner.

For many years, The Filter Paper Co., has been serving the soybean industry in the United States.

The home office and plant is located at 2433 S. Michigan Ave., Chicago 16, Ill.

paper is better!-paper costs less!

That's why more and more mills pack meal in St. Regis Multiwall Paper Bags!

are you interested in saving money for yourself—*and* your customers?
in packing *more* meal in *less* time at *lower* cost?
in a *cleaner*, more *attractive* package?

then you'll be interested in finding out all about St. Regis Multiwall Paper Bags, and the one-man St. Regis Packer. Write your nearest St. Regis Sales Office today for full information. We'll send you complete details on this new, modern, *economical* meal packing system.

- ★ **ST. REGIS MULTIWALLS** *cost less.*
- ★ **ST. REGIS MULTIWALLS** *are easier to handle, easier to pack, take less space.*
- ★ **ST. REGIS MULTIWALLS** *are stronger, more durable, stand up longer.*
- ★ **ST. REGIS MULTIWALLS** *are cleaner, contents can't sift out. "Come cleaner," too, no retention.*
- ★ **ST. REGIS MULTIWALLS** *protect against rain, mildew, caking.*

SALES SUBSIDIARY OF ST. REGIS PAPER COMPANY

ST. REGIS
SALES CORPORATION
230 PARK AVENUE • NEW YORK 17, N. Y.

Allentown, Pa. · Atlanta
Baltimore · Birmingham
Boston · Chicago
Cleveland · Denver
Detroit · Houston
Kansas City, Mo. · Los Angeles
Louisville · Minneapolis
New York · Norfolk · Ocala, Fla.
Portland, Ore. · St. Louis
San Francisco · Seattle

In Canada:
St. Regis Paper Co. (Can.) Ltd.
Montreal · Hamilton · Vancouver

YOU BUY PROTECTION WHEN YOU BUY MULTIWALLS

Progress made in the development of improved methods of processing oilseeds and in research on new and improved oilseed products was reported at a recent working conference by the Southern Regional Research Laboratory at New Orleans. Representatives of 10 southern state experiment stations were in attendance.

* * * *

Alfred D. Kennedy, Sr., president of Davidson-Kennedy Co., Atlanta, Ga., passed away recently in that city.

* * * *

Charles D. Jacoby has been named manager of the H. Schumacher Oil Works, cottonseed and soybean oil mill at Navasota, Texas.

* * * *

Tom G. Luby has returned to his position as superintendent of the Baltimore mill of Soya Corporation of America whose headquarters are in New York City.

* * * *

Promotions at Clinton Foods, Inc., Clinton, Iowa include Robert A. Swanson to manager of feed, oil and soybean sales department and John H. Wilson to assistant manager.

* * * *

J. I. Case Co., Inc., Racine, Wis., has recently issued a new bulletin describing mounted implements which it manufactures.

* * * *

New improved rounded head and side motor mounting are some of the features of the 1950 line of the belt and bucket elevators manufactured by the J. W. Hance Manufacturing Co., Columbus, Ohio.

* * * *

Appointment of Lowell O. Gill as technical director of A. E. Staley Manufacturing Co., Chicago, has been announced by A. E. Staley, Jr., president.

* * * *

Walter Geist was elected by the stockholders of the Allis-Chalmers Manufacturing Co., Milwaukee, Wis., to serve his ninth term as president.

* * * *

Miss Elizabeth McGee, Spartanburg, S. C., the 1950 "Maid of Cotton," was guest of Everett Mitchell on the National Farm and Home Hour May 20. Miss McGee told Mitchell about her tour of the United States, England and France as representative of the American cotton industry.

* * * *

Morton-Myers Co., Kansas City, Mo., has been appointed sales representative for the chemical division of General Mills, Inc., for Kansas, Nebraska and western Missouri.

* * * *

A. R. Staley has been appointed sales promotion manager of the A. E. Staley Manufacturing Co., Decatur. He is a son of the founder of the company and has been a director since 1941.

* * * *

Riechman-Crosby Co., Memphis, Tenn., held a 2-day sales conference recently at the Claridge Hotel with Richard Alcott as chairman.

* * * *

A. Q. Petersen, president of Wesson Oil & Snowdrift Co., Inc., of New Orleans, La., and Harold D. Wright, of Republic Coal & Coke Co., Chicago.

JOINS McMILLEN

J. L. KRIDER

Dr. J. L. Krider, head of the swine division of the department of animal science at the Illinois College of Agriculture, has been appointed director of feed research and education of McMillen Feed Mills, division of Central Soya Co., Inc.

Recently he was the recipient of a $1,000 award from the American Feed Manufacturers Association for outstanding research in swine nutrition.

In commenting on Dr. Krider's appointment, effective July 1, Fred W. Thomas, president of the company, said, "The creation of a post of director of research has been considered for some time. Dr. Krider has made an outstanding record in the field of nutritional research and has achieved eminence as an author of more than 50 popular and technical articles on swine research.

"As director of research Dr. Krider will have overall supervision of research and education."

DICKINSON BROTHERS CO.

VEGETABLE OILS AND MEALS

BROKERS

2420 Board of Trade

141 West Jackson Blvd

DB

HArrison 7-3793

CHICAGO 4, ILL.

mirror Magic!

You've got a bit of growin' to do, sonny. It takes lots of skill, training, and experience to be a good fighter, to be a good salesman. Chase Salesmen are thoroughly trained experts in the bag business . . . as it applies to your business. They are supported by more than one hundred years of experience in supplying better bags for American industry and agriculture. Do you want better protection? Do you want improved appearance? Do you want a container that is designed for your specific needs? All these important points add up to increased sales! Check with us today. Your Chase Salesman will promptly contact you . . . and you'll be glad he did!

Bags for all industry and agriculture

- cotton bags of all kinds
- Topmill burlap bags
- paper & Multiwall bags
- Saxolin open mesh bags
- combination bags, liners, and specialties.

CHASE BAG CO. GENERAL SALES OFFICES, 309 WEST JACKSON BLVD., CHICAGO 6, ILL.

BOISE • DALLAS • TOLEDO • DENVER • DETROIT • MEMPHIS • BUFFALO • ST. LOUIS • NEW YORK • CLEVELAND • MILWAUKEE
PITTSBURGH • KANSAS CITY • LOS ANGELES • MINNEAPOLIS • GOSHEN, IND. • PHILADELPHIA • NEW ORLEANS • ORLANDO, FLA. • SALT LAKE CITY
OKLAHOMA CITY • PORTLAND, ORE. • REIDSVILLE, N. C. • HARLINGEN, TEXAS • CHAGRIN FALLS, O. • HUTCHINSON, KAN. • CROSSETT, ARK. • SAN FRANCISCO

have recently been elected to the board of directors of the A. E. Staley Manufacturing Co., Decatur, Ill., to fill vacancies.

* * * *

Eriez Manufacturing Co., Erie, Pa., has announced that Dick Dietrich, 1355 Market St., San Francisco, is the exclusive west coast textile sales agent for Eriez permanent magnetic separators.

* * * *

J. H. Burrus has been appointed manager of the Milwaukee district of the Allis-Chalmers general machinery division, effective July 1. He has been with Allis-Chalmers since 1937.

* * * *

Among other food items Ohio farmers have contributed four car loads of soybeans to the Christian Rural Overseas Program in a recent drive.

* * * *

William M. Wallace, assistant to the manager of the basic industries department of Allis-Chalmers Manufacturing Co., has been selected to participate in the Sloan Fellowship program for executive development at the Massachusetts Institute of Technology.

* * * *

Stillpass Transit Co., Inc., Cincinnati, has moved from Walnut St. to larger quarters at 4967 Spring Grove Ave. The firm reports that it now transports tanktrucks of soybean oil, both crude and refined, intra-state from processing plants in the state of Illinois to Chicago, in addition to operations in Indiana, Kentucky and Ohio.

* * * *

United States Hoffman Machinery Corp., New York 3, N. Y., has recently announced the Hoffco-Vac No. 30 portable vacuum cleaning unit with application in soybean plants for the purpose of reducing explosion hazards and maintaining sanitation.

* * * *

Gittlin Bag Co., Newark, New Jersey, has recently added Ronald Sanders to the staff as salesman to assist Sales Manager Robert G. Schwartz.

* * * *

Consolidated Catalogs, published by American Miller & Processor for 1949-50-51, has been released. This book, 625 pages, is a classified catalog of machinery, equipment and supplies for the processing industries that store, clean, reduce, separate, sift, blend, mix and pack. Address inquiries to Consolidated Catalogs, 330 S. Wells Street, Chicago 6, Ill.

* * * *

Bulletin No. 63-A containing information on 11 different types of Standard Conveyor units designed for handling packaged materials may be obtained from Standard Conveyor Co., North St. Paul 9, Minn.

* * * *

Announcement that John A. Sutherlin has been appointed sales manager of Chase Bag Co.'s New Orleans branch was made recently by J. H. Counce, manager at New Orleans.

* * * *

Sterling Soybean Corp., Rock Falls, Ill., has purchased the Foxbilt Feed Mill at Rock Falls and is manufacturing its own line of feeds, "Cream a Feed."

* * * *

Volume 192 of The S-A Conveyor, house organ issued quarterly by Stephens-Adamson Mfg. Co., Aurora, Ill., contains pictures and sketch of soybean storage and conveying system used by the Drackett Co., Cincinnati, Ohio.

* * * *

Ups-and-Downs With Legumes by H. H. Laude, agronomist at Kansas State College, in May 6 issue of Kansas Farmer, touches on research with soybeans in that state.

* * * *

Jelke "Good Luck" products division of Lever Bros. Co. is coming out with a new package for yellow "Good Luck" Margarine July 1. "Only the finest United States vegetable oils are used in Good Luck," according to the label.

* * * *

Catalogue No. 8 put out by Foster Pump Works, 50 Washington St., Brooklyn 1, N. Y., describes pumps that can be used in many types of plants including the oil and fat, and paint and varnish industries.

50TH ANNIVERSARY

When the town of Bemis, Tenn., and the Bemis Cotton Mill there celebrated their golden anniversary May 20, Fred J. Young, manager of the town and of the mill, also celebrated the 50th anniversary of his association with Bemis Bro. Bag Co. in Bemis.

Young came to Bemis in 1901 and his father was first manager there.

FRED J. YOUNG

He succeeded to his present post at his father's death in 1928.

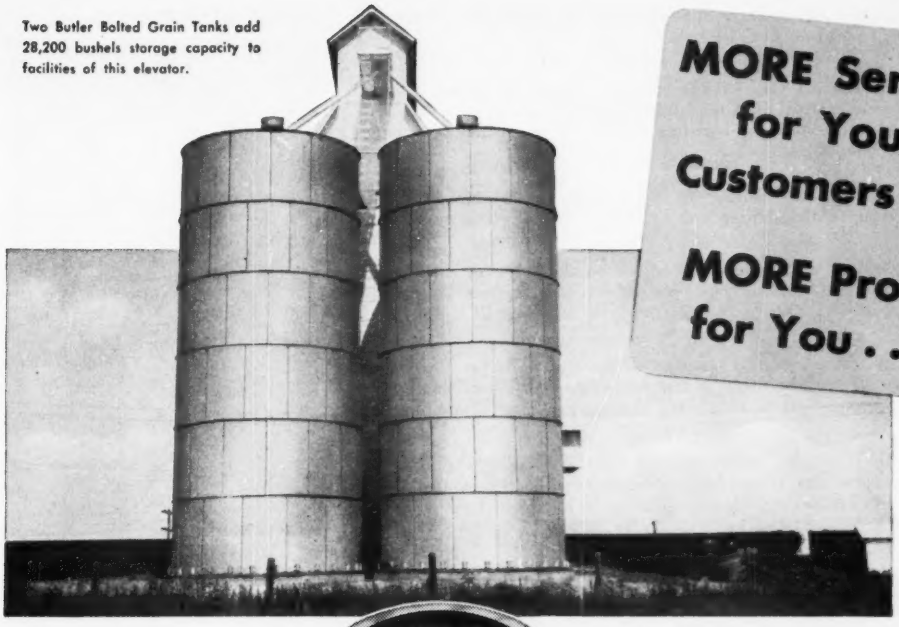
Judson Moss Bemis built the cotton mill at Bemis just 50 years ago. The firm then operated six plants, now operates 31.

— s b d —

NEW DEERE COMBINE

Here is the new John Deere No. 65 12-foot pull-type combine. One man has complete control of the tractor and combine. From the tractor seat, he raises or lowers the hydraulically controlled platform—operates the separator and grain tank throw-out controls. From the platform on back through the machine, the No. 65 is basically the same as the No. 55 Self-Propelled Combine. Tremendous capacity in feeding, threshing, separating, and cleaning units insures big daily acreage and more grain saved. The 65-bushel grain tank can be emptied standing still or on the go in 1½ minutes or less.

Two Butler Bolted Grain Tanks add 28,200 bushels storage capacity to facilities of this elevator.



MORE Service for Your Customers . . .

MORE Profit for You . . .

. . . with BUTLER Bolted Steel GRAIN TANKS

Take Your Choice of These Two Quick, Low Cost Construction Plans

1. Butler can help you arrange a complete turnkey installation by reliable, experienced Grain Elevator Contractors.

2. If you prefer to supervise your own installation, Butler supplies standard foundation plans and detailed, easy-to-follow erection plans, for quick erection by local labor.

Now you can increase your soybean storage capacity in time to serve your customers with adequate storage facilities this year. Available at a Minimum Investment, Butler Grain Tanks go up in a matter of days instead of weeks. And Butler Tanks are Fire-Safe, Weathertight, Structurally Strong . . . easily added to existing facilities. Butler Steel Tanks are keeping grain in first-class condition throughout the grain marketing area.

Soybeans and other grains can be safely stored in Butler Tanks. And there's practically no maintenance expense on Butler Tanks. Get ready now to solve your customers' storage problems and improve your profits . . . write, wire or phone for information or to place your order . . . *today!*

Tear Off and Mail Coupon TODAY

BUTLER MANUFACTURING COMPANY

KANSAS CITY, MO. GALESBURG, ILL.
RICHMOND, CALIF. MINNEAPOLIS, MINN.

For Prompt Reply, Address Dept. SD16, at Office Nearest You:

BUTLER MANUFACTURING CO.
7461 E. 13th St., Kansas City 3, Mo.
961 Sixth Ave., S.E., Minneapolis 14, Minn.
Richmond, Calif.

Please send me complete information on Butler Grain Tanks.

☐ I am planning on erecting my new storage with local labor.

☐ I am interested in Butler helping me plan a complete turnkey job.

Name.....

Firm.....

Address.....

City.....Zone.....State.....

W. Dean Sweet was recently appointed Ohio representative of the Burrows Equipment Co., Evanston, Ill.

* * * *

Burrows Equipment Co., 1316-D Sherman Avenue, Evanston, Ill., has just issued a new catalog containing information on all types of approved grain, seed and feed testing and handling equipment. Copy may be obtained by writing the company.

* * * *

Sullivan Grain Co., Sullivan, Ill., is building an additional 300,000 bushel storage tank and installing a dryer at its East Side elevator.

* * * *

New brochure containing specifications on the five most commonly used extraction solvents may be obtained on request from American Mineral Spirits Co., 230 North Michigan Ave., Chicago, Ill.

* * * *

Thomas W. Staley, general manager of the Staley Milling Co., Kansas City, has been elected chairman of the American Feed Manufacturers Association. H. J. Buist, Allied Mills, Inc., Chicago, was elected vice president.

* * * *

Thomas W. Hutchison, superintendent, West Tennessee Soya Mill, Tiptonville, Tenn., was one of the featured speakers at the convention of the Tri-States Oil Mill Superintendents Association in Memphis, June 1-2-3. He spoke on "Methods of Processing Soybeans by Solvent Extraction."

* * * *

Richard Alcott, vice-president, Riechman-Crosby Co., Memphis, Tenn., was finance chairman for the annual convention of the Tri-States Oil Mill Superintendents Association in Memphis, June 1-3.

* * * *

Morrisonville Farmers Co-op Co., Morrisonville, Ill., is building two 30,000-bushel concrete silos.

* * * *

Visiting lady delegates to the Tri-States Oil Mill Superintendents Association convention in Memphis June 1-3 received corsages, compliments of the Screw Conveyor Corp., Hammond, Ind. They were presented by Mr. and Mrs. Russell Maas.

* * * *

Donald R. Egan has been appointed sales representative of American Mineral Spirits Company for the state of Michigan. He will be responsible for servicing of Amsco's petroleum solvent tank car accounts in Detroit and over the state.

JOINS DELPHOS CO.

KENNETH E. SCHULTZ

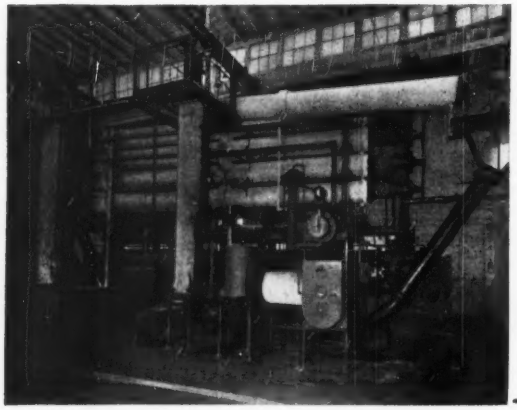
Kenneth E. Schultz has recently joined the staff of the Delphos Grain & Soya Products Co., Delphos, Ohio, as the control laboratory chemist and grain solicitor.

He is a graduate of the University of Wisconsin in chemical engineering, and spent the first 5 years following graduation as a supervisor and chemist with the B. F. Goodrich Co. of Akron.

Prior to his present position, Schultz was associated with the Grain Processing Corp., a government alcohol and feed plant, and with Muscatine Processing Corp., a soybean solvent extraction plant at Muscatine, Iowa.

FOR SAFE, PROFITABLE EXTRACTION

...A PROVED AND TESTED NON-FLAMMABLE SOLVENT OIL EXTRACTION PLANT



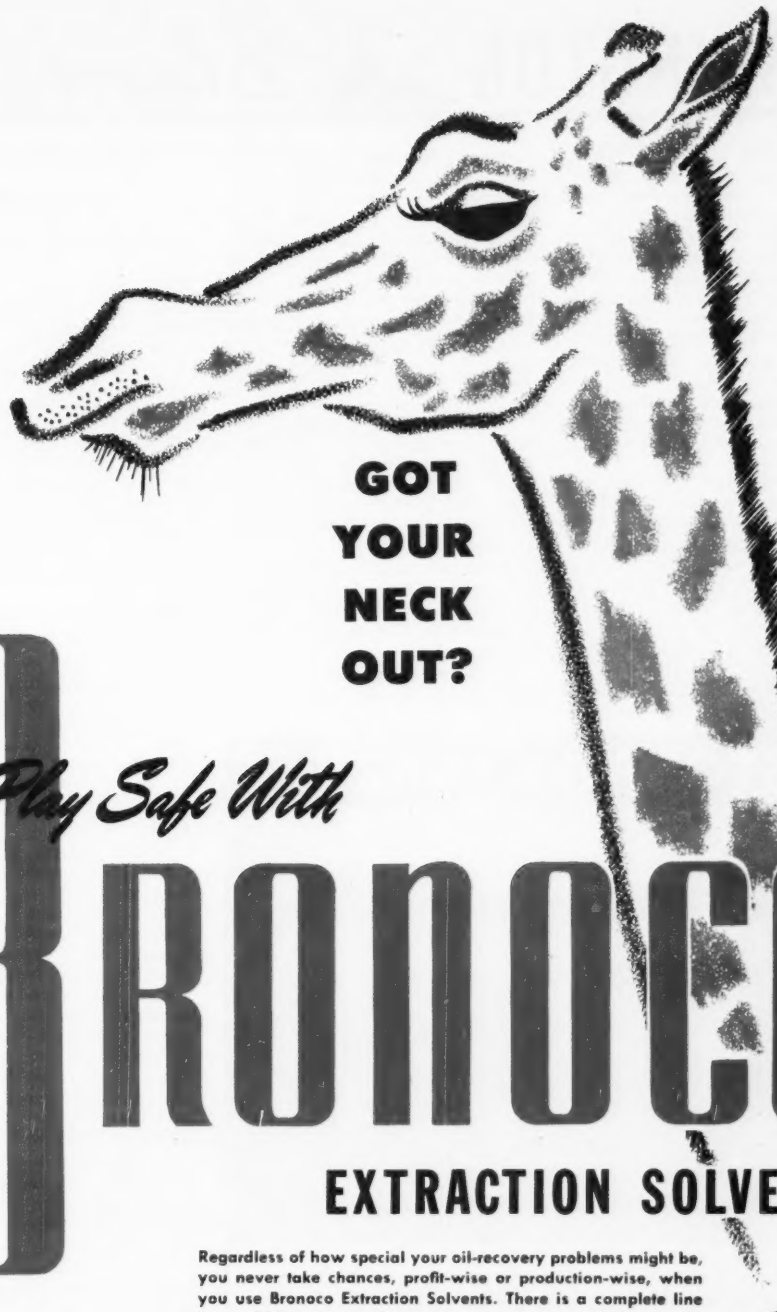
● Here is a small (twenty-five ton), efficient extraction system especially developed for use in smaller operations. This plant, thoroughly tested and proved, uses non-flammable Trichlorethylene solvent and is manufactured under exclusive patent rights of Iowa State College. Operating data on this system, including figures on consumption and yield, will be provided on request.

You are invited to see this plant in actual operation.

Write for additional information.

CROWN IRON WORKS CO.

1267 Tyler St. N. E. • Minneapolis 13, Minn.



GOT YOUR NECK OUT?

Play Safe With

BRONOCO

EXTRACTION SOLVENTS

Regardless of how special your oil-recovery problems might be, you never take chances, profit-wise or production-wise, when you use Bronoco Extraction Solvents. There is a complete line from which you may choose to meet your most exacting specifications. The services of an experienced Bronoco Technician are yours on request — without obligation, of course.

WRITE . . .
in confidence **NOW**

TIME AND TEST PROVEN

THE R. J. BROWN COMPANY
1418 Wittenberg Ave. • St. Louis 10, Mo.

Plants in Detroit, Louisville and St. Louis • Distribution facilities in many major industrial centers

WASHINGTON Digest

By PORTER M. HEDGE

Washington Correspondent for The Soybean Digest

1950 ACREAGE. A 15-million-acre bean crop won't wreck prices. That isn't the official view here yet, but it's gaining supporters.

It will require about 14 million acres at 5-year average yields to bring the combined soybean-cottonseed oil supply for 1950-51 up to the current year's level.

Private estimates put the cotton crop at 11 to 11½ million bales. That's about 30 percent less than the last crop. This would require about 56 million bushels more beans this year to offset the decrease in cottonseed supply.

Lard output will increase, but only moderately if farmers continue to market hogs at light weights.

Fat and oil exports for 1950-51 are expected to decline but not more than 15 percent if bean and lard prices stay close to last winter's levels.

Consumption of margarine, which took 17 percent of soybean oil in 1948 and 1949, will increase only moderately the coming year, officials think. They believe the big consumption shift will be from white to colored margarine. Sixty percent of the population live in the 32 states where sale of the colored product is permitted.

It boils down to this: If total fat and oil supply isn't much higher than last year's record output, markets will absorb it without sharp declines. That is, declines from last winter's price levels.

Oil prices are now rated by several government and private market analysts at around 20 percent too high. Tentative estimates are now being made that 1950-51 edible oil price level will average around 12c a pound.

If the 1950 bean crop doesn't go above 300 million bushels (222 million last year), a season's average farm price of $2.10 to $2.25 a bushel is quite possible.

USDA officials still look for 15 million acres of beans to be planted. If anything, more. Chief reasons cited: The oat planting setback, delayed corn planting, and zooming bean prices. One large private company has estimated plantings at 18 million acres.

High bean prices have virtually stopped exports. None were shipped on the ECA program in March and April, though one cargo of about 330,000 bushels was bought in that period. ECA soybean oil purchases from July 1 to February 28 totalled $14.4 million; in March and April, $2.3 million.

SUPPORTS. House agriculture committee hearings start the latter part of June on price supports, with particular reference to perishables and to two-price plans for wheat and cotton. Several self-finance plans will be studied. Leaders also want to go into the matter of import restrictions on price supported commodities—Sec. 22 of the 1938 AAA Act.

Interest centers on price insurance. It's proposed as a means of financing a large part of the cost of price supports, and to make production payments practicable for livestock, dairy and poultry products. The idea is to make insurance voluntary, but to require producers to pay premiums of say 5 percent on gross receipts in order to get loans on storable crops, or production payments on perishables. Crop loan rates would be kept high, and support rates for livestock products set on a feed ratio basis.

Chairman Cooley (D.,N.C.) and several other House leaders of both parties think price insurance should be carefully studied. So does Secretary Brannan.

There is no thought of new legislation this year—only of doing the spade work now for 1951.

The common interest of Brannan and House leaders in the insurance approach is bringing a fresh attempt at better teamwork between the Hill and USDA. It's lousy now, and hampers all kinds of farm legislation.

STORAGE TANKS

LEADER BUILDS
TANKS — KETTLES — FRACTIONATING COLUMNS
HEAT EXCHANGERS and SPECIAL EQUIPMENT
OF
STEEL—STAINLESS STEEL—NICKEL—MONEL
INCONEL—COPPER—EVERDUR—HERCULOY
HASTELLOY — ALUMINUM and CLAD STEELS
LEADER IRON WORKS, INC.
2158 N. JASPER DECATUR, ILLINOIS

House leaders are also using the insurance proposal as the basis for getting farm legislation on a bi-partisan basis again. This has been discussed by top members in both parties, and agreement reached that a try be made.

The other self-finance proposal to get the most attention is the surplus disposal pool and equalization fee plan of the National Milk Cooperative Federation. A bi-partisan board would buy up surpluses at market prices, and later sell domestically, export or divert its stocks at whatever they'd bring. Equalization fees would be estimated for each commodity, representing the net loss. Fees would be deducted from farmers' sales. The plan is designed for all commodities. It would require import controls.

Several two-price plans will be considered by the House. The methods in the various bills vary, but the main idea is the same:

A high price for the domestically consumed portion of a surplus crop, world price for exports. Sponsors have wheat and cotton chiefly in mind. Most of the plans involve the use of certificates—much like the old domestic allotment plan.

Both in Congress and in Administration circles, the conviction is growing that it will take two-price systems or their equivalent to keep farm exports from skidding after next year. There is also increasing official uneasiness as to whether acreage controls will work when a large number of crops are involved, if acreage cuts are sharp.

IMPORT CONTROL. The fats and oils import equalization fee bills are getting nowhere in Congress. Senator Gillette (D.,Ia.) introduced the bill in the Senate, Rep. Granger (D.,Utah) in the House.

Neither Senate nor House agriculture committee has reported the bill out. Discussions in the House bogged down by members wanting the same for their pet commodities. Granger was unable to get the talk centered on the fats and oils problem.

Congress will extend import controls (which include fats and oils) for another year. Controls expire June 30 unless renewed. There seems to be no question about a 1-year extension, but the Senate has balked at a 2-year deal.

FDA RULING? Food and Drug Administration officials say they will issue a ruling "soon" on the use of chemical extenders in bakery products. They say the question as to toxicity of these chemicals has not yet been determined.

The forthcoming ruling will be tentative. All parties will be given a chance to speak their pieces before it's made effective.

The ruling may be any one of three types:

1—Recognize the use of chemical extenders without a labelling requirement.

2—With labelling required.

3—Prohibit the use altogether.

— s b d —

BRIERLEY

(Continued from page 23)

Even more important, there must be a study of reciprocity on a national scale. Despite the glowing ECA reports of German recovery, they are a long, long way from selling enough goods to the United States to hope for any continuing market when the Marshall Plan expires.

American business is going to have to find some way to allow German imports if we expect to continue selling goods to Germany. In business we call this "reciprocity."

Market Street

We invite the readers of THE SOYBEAN DIGEST to use "MARKET STREET" for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here.

Rate: 5c per word per issue. Minimum insertion $1.00.

FOR SALE—OIL MILL EQUIPMENT. Anderson Expellers, French Screw Presses all models, as is or rebuilt for specific materials. Pittock and Associates, Glen Riddle, Penna.

WANTED: Interested in purchasing small solvent pilot plant suitable for soybeans. Ton per hour or less OK. Will move. Reply Soybean Digest, Box 319P, Hudson, Iowa.

FOR SALE—Grain elevator. In heart of Southeastern Missouri soybean belt. Has six car siding. Located on one acre of ground. Most modern elevation equipment. Truck unloading dump with screw conveyor. Operated by electricity. 34 foot scale. Butler storage tanks. Office building. Everything less than one year old. For further information write Standard Commission Company, 414 Cotton Exchange Building, Memphis, Tennessee.

POSITION WANTED: Graduate chemical engineer (Iowa State College) familiar with solvent plants desires position in development or production in this field. I. F. Deaton, 3425 Woodland, Ames, Iowa.

As long as ECA keeps pouring out money, Germany will have a surface prosperity, but look out after ECA is over. Germany, like the rest of Europe, is not digging in and solving its basic problems.

It is time that the American soybean industry took the lead in actively investigating this problem and proposing a program that will eventually place Europe on its feet.

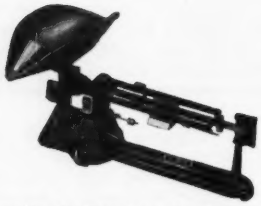
Sewrey - Gartside Company

SOYBEAN OIL BROKERS

F. A. Sewrey
W. T. Gartside
208 S. LaSalle St., Chicago 4

TELEPHONE:
Franklin 2-4732

Seedburo No. 14 Four-in-One, a small, complete office scale for weighing samples for moisture tests, determining test weights per bushel, dockages, and mailing matter. **$38.95**



Seedburo No. 99 Gram Scale. Accurate, inexpensive scale weighing in grams for grain testing. Constructed of tough aluminum alloy to stand years and years of hard use. **$28.65**

Grain Inspection and Dockage Scales. Automatic . . speedy. Adaptable for use in determining dockage of any kind of material, as well as for percentage analysis.

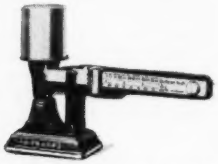
SCALES FROM SEEDBURO

of every capacity for every purpose

You can select scales with the capacity and sensitivity that best meet your requirements from Seedburo's broad line. Types available range from precision-built balances to rugged, heavy-duty platform and truck scales, specially designed for elevator, seed house, mill or processing plant.

Bring your weighing problems to us . . . we'll be glad to help you solve them.

Write for specification and prices.

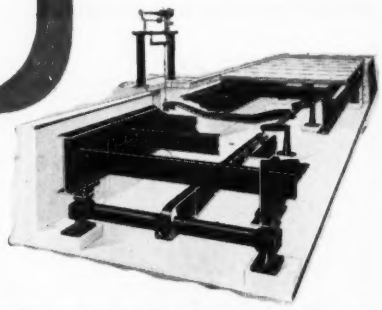


No. 103 Percentage Scale with cup. Ideal for rapid and easy determination of weight per bushel and dockage percentages. Includes 1 pint brass container. **$21.60**

Seedburo No. 127 Seed Scale for weighing small quantities of seed. Thoroughly accurate—yet inexpensive. **$32.50**

No. SE-1 Torsion Balance Scale. Recommended for very fine weighings. Capacity, 120 grams. Sensitivity, 2 milligrams. Price, without weights—**$190.00**

No. 498 Eureka O.K. Bagging Scale. Weighs as it fills. Will handle four to six 100-pound bags per minute. Easy to install at working height of bagging spout or hopper. **$295.00**



Seedburo Type "S" Truck Scale for motor trucks, trailers, tractor trailers, etc. Fifteen to 50-ton capacity.

SEEDBURO

729 Converse Bldg.
Chicago 6, Illinois

In The MARKETS

MARKETS AT '50 HIGHS

Soybeans, meal and oil all found new highs for the 1949-50 crop season during May.

The soybean futures markets were unsettled with wide up and down swings. But end-of-the-month level for July soybeans was well above that of a month earlier.

Meal and oil were both sensitive to the fluctuations in soybean futures.

During the fourth week in May July futures went up the 10c limit on two successive days, then declined the limit on the third. Affecting the market were news that quantities of soybeans were being drawn out of Chicago warehouses by processors for lack of enough country run soybeans to keep their plants running, and rumors that sizable amounts of soybeans on the East Coast were being brought back to Chicago for lack of an Eastern or export market. Reports of materially increased plantings of soybeans in some big bean states also had their effect.

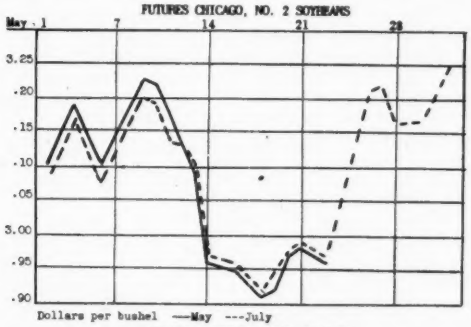
Processors on the whole were eager buyers of soybeans in spite of lack of a favorable conversion price ratio.

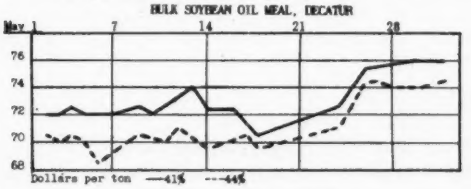
The cash soybean oil meal market pushed up to a level $7 above April by the end of May.

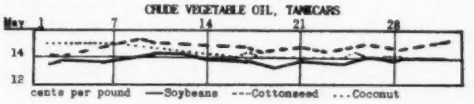
Production of solvent meal was reported heavy. But screw press meal was a scarce commodity with most screw press plants closed down.

The crude soybean oil market was on the whole steady with a slightly rising trend.

Oilseed cake and meal supplies for the first half of the season were the largest of record and totalled almost 4.5 million tons, reports Production and Marketing Administration. This was about 375,000 tons more than in the same months last year and 780,000 tons more







JONES-HETTELSATER CONSTRUCTION CO.

30 YEARS as Designers and Builders

✶

FLOUR MILLS
ELEVATORS

✶

FEED & SOYBEAN PLANTS

1911 Baltimore Ave.
KANSAS CITY 8, MISSOURI

NO *waste* --- NO *loss*
NO *measuring*

Inoculation of soybean seed becomes easy, sure and effective when you use this non-sticky humus base inoculant. It coats the seeds visibly, thoroughly and quickly—yet never gums the planting machine. And in addition, you gain both speed and economy as well.

LEGUME-AID

The famous inner lined carton package protects the potency of the nitrogen fixing bacteria and holds exactly enough inoculant to treat five bushels of soybeans. Order what you need. Open each package fresh as you treat each batch of seed. No waste, no loss, no measuring. No inoculant does more for soybeans than LEGUME AID. Tell your dealer you want it.

AGRI-LAB-INC
AGRICULTURAL LABORATORIES, INC.
1312 Chesapeake Ave. Columbus 2, Ohio

The INOCULANT in the CARTON

Sheldrick
UNIVERSAL
MOISTURE TESTER

The Greatest Advancement in Twenty Years!

The secret is control.

CONTROL of calibrations by built-in correlator dial gives direct moisture percentage readings . . . no charts required.

CONTROL of temperature readings permits the quick testing of frozen, hot or kiln dried samples.

CONTROL of sample volume gives test after test consistency with greater accuracy.

CONTROL of electrical supply eliminates inaccuracies due to variations in line voltage.

Can be used for testing grain, feed, seed and other products. Makes complete test in less than one minute. Rugged, reliable, no maintenance. Precision-built by Sheldrick.

Do YOUR moisture testing the MODERN way. Write today for literature and liberal FREE trial offer.

BURROWS
EQUIPMENT COMPANY
1316-D SHERMAN AVE. EVANSTON, ILL.

USED BAGS
COMPLETELY RECONDITIONED
AT LOWEST PRICES

Complete assortments of reconditioned used and surplus bags ready for prompt shipment.

Processed and reconditioned in the foremost modern plant in the Mid-West. Each bag is vacuum cleaned, sorted, graded, mended and inspected before baling ready for shipment.

We have the type and size of bag that you want and can supply you immediately.

Bag printing in colors. Your own label or we submit sketches and ideas.

FOR PROMPT SERVICE WRITE—WIRE OR TELEPHONE COLLECT
2-8355

MIDWEST
BURLAP AND BAG CO.
213 THIRD STREET • DES MOINES, IOWA

than for 1947-48. Record crushings of soybeans and small exports of meal resulted in about 12 percent more soybean meal the first half of the season than for the same period last year. Supplies, October through March totalled 2.4 million tons. Exports of oilseed meals the first 6 months of the season totalled 157,800 tons compared with 218,400 tons last season.

Approval of a contract to exchange U. S. cotton for Manchurian soybeans for use by the Department of the Army in Japan, was announced by Ralph S. Trigg, president of Commodity Credit Corp.

The contract, which was made with a New York export-import firm, involves the exchange of 60,000 tons of Manchurian yellow soybeans for CCC-owned commodities, principally cotton.

The soybeans acquired by CCC will be shipped directly to Japan from Manchuria, from which Japan normally imports its soybean requirements. The soybeans will be used by the Department of the Army to meet food needs.

Chicago No. 2 soybeans, May futures, opened at $3.10 for May and closed at $2.96 May 22. High was $3.23 May 8 and low was $2.92 May 17. July soybeans opened for the month at $3.08, closing at $3.25½, the high. Low was $2.91 May 17.

Bulk soybean oil meal, basis Decatur, opened at $72 and closed at $76, the high. Low was $70.50 May 17.

Crude soybean oil in tankcars opened at 13½c and closed at 14c. High was 14⅛c May 9-11. Low was 13¼c May 18.

MEMPHIS SOYBEAN OIL MEAL FUTURES CLOSINGS MAY 31*
Decatur sacked basis, per ton: July, 78.85 @79.25; Oct., flat 57.00; Dec., flat 55.20; Jan., 55.00 @55.40; Mar., 55.20 @55.40. Sales: 6,400 tons.

NEW YORK CRUDE SOYBEAN OIL FUTURES CLOSINGS MAY 31*
Closings: June, 14.10b; Aug., 13.95b; Jan. '51, 11.10b; Feb. 10.90b; Mar., 11.00b; Apr. and May, 11.25n. Total sales: 37 contracts.
b—Bid. n—Nominal.
*Reported by the Chicago Journal of Commerce.

● **FACTORY USE SOYBEAN OIL.** Factory production of crude soybean oil in March was 177,518,000 lbs., reports Bureau of the Census. Production in February was 153,046,000 lbs.

Factory production of refined soybean oil in March was 146,063,000; in February 118,749,000 lbs.

Factory consumption of crude soybean oil in March was 157,673,000 lbs.; in February 128,588,000 lbs. Factory consumption of refined soybean oil in March was 139,881,000 lbs.; in February 111,398,000 lbs.

Factory and warehouse stocks of crude soybean oil Mar. 31 totaled 87,228,000 lbs.; Feb. 28 78,911,000 lbs. Stocks of refined soybean oil totaled 64,118,000 lbs. Mar. 31; 66,791,000 lbs. Feb. 28.

Crude soybean oil entered into the following uses in March: soap 122,000 lbs.; paint and varnish 307,000 lbs.; lubricants and greases 25,000 lbs.; linoleum and oilcloth 89,000 lbs.; other 1,136,000 lbs. Refined soybean oil found the following uses in March: shortening 60,606,000 lbs.; other edible 7,138,000 lbs.; soap 83,000 lbs.; paint and varnish 8,386,000 lbs.; lubricants and greases 20,000; linoleum and oilcloth 3,771,000 lbs.; other inedible 5,777,000 lbs.

Hydrogenated edible soybean oil was used in the following products in March: shortening 12,531,000 lbs.; margarine 22,951,000 lbs.

● **SHORTENING SHIPMENTS.** Reported by Institute of Shortening and Edible Oils, Inc., in pounds.

Week ending Apr. 29	3,606,166
Week ending May 6	3,521,176
Week ending May 13	4,794,702
Week ending May 20	4,791,512

Total shipments of shortening and edible oil during the first quarter 1950 were 834,265,000 lbs.

● OIL MILL PRODUCTS. Reported by Bureau of Census, Department of Commerce.

PRIMARY PRODUCTS EXCEPT CRUDE OIL, AT CRUDE OIL MILL LOCATIONS: PRODUCTION, SHIPMENTS AND TRANSFERS AND STOCKS, MARCH 1950—FEBRUARY 1950

Products	Production		Shipments and transfers		End of month stocks	
	Mar. 1950	Feb. 1950	Mar. 1950	Feb. 1950	Mar. 31, 1950	Feb. 28, 1950
SOYBEAN:						
Cake & meal†	422,443	363,249	415,147	355,344	76,951	69,655
Lecithin‡	1,214,298	1,034,130	1,289,770	1,061,501	835,693	911,165
Edible soy flour, full fat†	(*)	379	441	408	(*)	222
Edible soy flour, other†	7,869	5,919	7,338	5,724	3,079	2,548
Industrial soy flour†	(*)	(*)	(*)	(*)	(*)	(*)

(*) Not shown to avoid disclosure of individual operations.
† Unit of measure in tons. ‡ Unit of measure in pounds.

SOYBEANS: RECEIPTS, CRUSHINGS AND STOCKS AT OIL MILLS, BY STATES, MARCH 1950—FEBRUARY 1950
(tons of 2,000 pounds)

State	Receipts at mills		Crushed or used		Stocks at mills	
	Mar. 1950	Feb. 1950	Mar. 1950	Feb. 1950	Mar. 31, 1950	Feb. 28, 1950
U. S.	356,677	308,445	543,355	463,979	1,439,731	1,626,409
Arkansas	(†)	(†)	10,607	9,250	36,574	49,315
Illinois	142,223	126,871	196,745	182,991	580,219	634,741
Indiana	7,063	50,772	49,490	40,873	139,790	182,217
Iowa	87,709	47,492	96,893	80,697	197,115	206,299
Kansas	(*)	(*)	9,774	7,702	12,993	(*)
Kentucky	10,958	7,417	15,183	14,194	(*)	(*)
Minnesota	17,450	10,689	14,823	14,697	14,659	12,032
Missouri	(*)	(*)	23,889	17,656	72,197	(*)
Nebraska	2,760	(*)	5,270	3,721	(*)	(*)
N. Carolina	650		7,945	(*)	(*)	(*)
Ohio	57,385	42,961	67,773	60,083	223,291	233,679
All other	33,263	27,165	44,963	32,115	162,893	308,126

† Receipts exceeded by reshipments of beans previously received and held in the State. U. S. receipts are on a net basis, excluding transfers between mills.
* Included in "All other" to avoid disclosure of individual operations.

SOYBEAN PRODUCTS: PRODUCTION AND STOCKS AT OIL MILL LOCATIONS, BY STATES, MARCH 1950—FEBRUARY 1950

State	Crude oil (thousand pounds)				Cake and meal (tons)			
	Production		Stocks		Production		Stocks	
	Mar. 1950	Feb. 1950	Mar. 31, 1950	Feb. 28, 1950	Mar. 1950	Feb. 1950	Mar. 31, 1950	Feb. 28, 1950
U. S.	177,518	153,046	27,804	31,315	422,443	363,249	76,951	69,655
Arkansas	3,129	2,774	592	329	8,530	7,391	5,590	4,723
Illinois	66,955	62,177	8,948	9,224	146,018	136,528	17,037	18,124
Indiana	16,295	13,475	1,596	1,779	39,447	32,799	3,944	3,058
Iowa	31,567	26,545	6,206	6,367	78,983	65,824	17,389	13,105
Kansas	3,339	2,707	700	861	7,877	6,407	(*)	(*)
Kentucky	5,418	5,063	485	520	11,825	11,064	672	1,018
Minnesota	4,829	4,797	1,279	1,992	12,269	11,846	2,885	3,624
Missouri	7,353	5,581	1,193	1,718	19,419	14,582	2,520	1,463
Nebraska	1,603	1,142	496	295	4,437	3,120	(*)	(*)
N. Carolina	2,198	(*)	760	457	6,315	(*)	5,558	4,955
Ohio	21,997	19,390	3,112	4,568	51,516	47,509	3,246	2,535
Oklahoma							(*)	(*)
All other	12,835	9,395	2,437	3,205	35,807	26,179	18,110	17,050

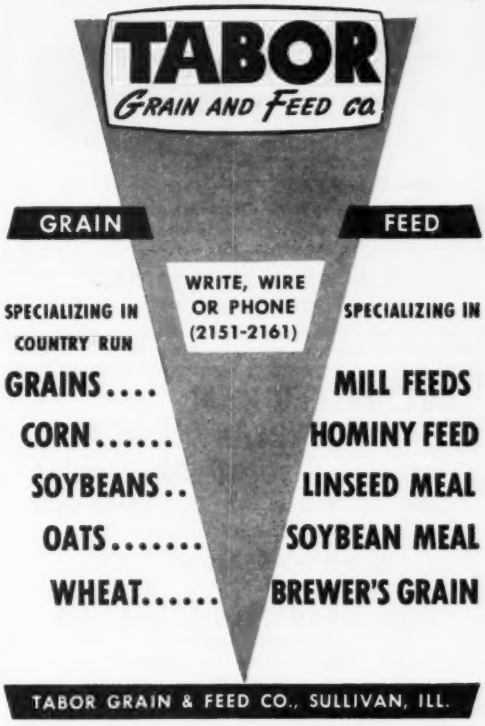
* Included in "All other" to avoid disclosure of individual operations.

● STOCKS OF SOYBEANS.

Nearly 120 million bushels of soybeans remained in all storage positions on Apr. 1, according to reports assembled by the Bureau of Agricultural Economics. These stocks are the largest in the 8 years for which comparable data are available, about 4.6 million bushels more than on Apr. 1, 1949 and 3.3 million more than the previous Apr. 1 record in 1943.

Included in the current total are 48 million bushels of soybeans at processing plants, as enumerated by the Bureau of the Census, and over 10 million bushels of commercial stocks at terminals, reported by the Production and Marketing Administration. In addition, the crop reporting board estimates stocks of 44 million bushels on farms and more than 17 million bushels at interior mills, elevators and warehouses. Stocks at processors are largest of record for Apr. 1, but those in each of the other positions have been exceeded several times on this date.

From total stocks of 179½ million bushels on January 1, 1950, disappearance of nearly 60 million bushels is indicated by current stocks. In the January-March quarter, 50,487,000 bushels were processed for oil, ac-



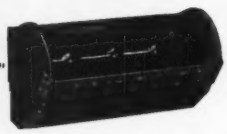
MARIANNA
SALES COMPANY
MEMPHIS 1, TENN.

Dealers in
Soybean and Cottonseed Products

Brokers in
Soybean and Cottonseed Meal Futures

Members
Memphis Merchants Exchange
American Feed Manufacturers Association
Tel. 55707 L. D. 364

THE FACT STILL REMAINS THAT SUPERIOR ELEVATOR CUPS "DP" - "OK" - "CC" - "V" are MADE STRONGER will LAST LONGER have GREATER CAPACITY



and will operate more efficiently at less cost than other elevator cups.

write to

K. I. WILLIS CORPORATION
MOLINE, ILLINOIS

for names of distributors and analysis form No. 20

COTTONSEED MEAL
SOYBEAN OIL MEAL
PEANUT MEAL

Cake — Pellets — Cottonseed Hulls
Domestic and Export

COME TO HEADQUARTERS

THE BRODE' CORPORATION
Memphis, Tennessee
Local Phone: 38-2544 LD-271
Teletype: ME-260

On request we will mail you our frequent market bulletins.

USED OIL MILL EQUIPMENT
one part or complete plant

Expellers all sizes and makes. Various size Filter Presses.
Hydraulic Cake Presses. Hot and cold Cake Cutters.
Seed Cleaning Equipment. Flaking rolls 36 to 40".

Stack cookers or toasters from one high to six high—54-72-85" diameter. Attrition mills. Hydraulic pumps. Accumulators. Conveyors. Boilers. Engines. Motors.

Let Us Know Your Needs.
If it is used in the oil mill we have it.

V. A. LESSOR & COMPANY
PHONE 6-3352 CABLE ADDRESS—VALCO
P. O. BOX 108 FORT WORTH, TEXAS

KALO
INOCULATION
for SOYBEANS
Made only from strains of bacteria proven to fix more nitrogen

Also Process-patented UNICULTURE . . . 2 or 3 Cultures in One Can . . . for Clovers and Alfalfa . . . or Clovers, Alfalfa and Soybeans

KALO INOCULANT CO., QUINCY, ILL.

cording to the Bureau of the Census. From current stocks, it is likely that 18 to 19 million bushels will be required for seed. Even with substantial quantities to be exported, sufficient supplies appear to be on hand to permit processing at the usual rate until the 1950 crop becomes available, says BAE.

STOCKS OF SOYBEANS, APRIL 1, 1952, WITH COMPARISONS

Position	Apr. 1, 1948	Apr. 1, 1949	Jan. 1, 1950	Apr. 1, 1950
		—Thousand bushels—		
On Farms (1)	33,110	52,279	61,908	44,014
Terminals (2)	7,613	7,206	16,133	10,241
Processing Plants (3)	36,894	36,305	66,508	47,991
Int. Mills, Elev. & Whses.* (1)	10,845	19,262	34,906	17,417
Total	88,462	115,052	179,455	119,663

(1) Crop Reporting Board
(2) Grain Branch P.M.A.
(3) Bureau of the Census
* All off-farm storages not otherwise designated.

OFF-FARM* STOCKS OF SOYBEANS, APRIL 1, 1950, WITH COMPARISONS

States	Apr. 1, 1949	Jan. 1, 1950	Apr. 1, 1950	States	Apr. 1, 1949	Jan. 1, 1950	Apr. 1, 1950
	—Thousand bushels—				—Thousand bushels—		
Ohio	6,961	14,683	10,231	Kans.	561	2,280	1,064
Ind.	4,838	10,330	6,286	N. C.	452	1,526	782
Ill.	22,084	45,457	29,798	Ky.	1,748	3,093	1,756
Minn.	4,093	4,607	2,914	Ark.	1,249	2,561	1,283
Iowa	11,039	17,337	11,359	All other	5,923	9,269	6,050
Mo.	3,825	6,404	4,126	U. S.	62,773	117,547	75,649

* Includes stocks at processing plants, as enumerated by the Bureau of the Census; commercial stocks at terminals, reported by the Grain Branch, P.M.A.; and stocks in interior mills, elevators and warehouses, estimated by the Crop Reporting Board.

● **SOYBEAN STOCKS.** Production and Marketing Administration's commercial grain stock reports for May.

	May 1	May 8	May 15	May 22
Atlantic Coast	865	803	822	836
Gulf Coast	623	519	313	313
Northwestern and Upper Lake	408	416	488	428
Lower Lake	4,264	4,111	4,175	3,997
East Central	1,215	1,168	1,146	1,095
West Central, Southwestern & Western	1,159	1,141	1,110	1,069
Total current week	8,534	8,158	8,054	7,738
Total year ago	3,817	3,079	2,773	3,166

● **SOYBEAN GLUE.** Consumption of soybean glue by the softwood plywood industry in February totaled 3,005,000 lbs.; in January 3,128,000 lbs.; and Feb. 1949 2,421,000 lbs.

Consumption of phenolic resin glue in February was 2,819,000 lbs. Total consumption of all glues by the plywood industry was 6,630,000 lbs. in February compared with 6,727,000 lbs. in January; and 5,032,000 lbs. in Feb. 1949.

Stocks of soybean glue totaled 1,886,000 lbs. Feb. 28; 2,017,000 lbs. Jan. 31; and 1,607,000 lbs. Feb. 28, 1949.

Consumption of soybean glue by the plywood industry in March totaled 4,018,000 lbs. Consumption of phenolic resin glue in March was 3,499,000 lbs. Total consumption of all glues in March was 8,438,000 lbs. compared with 6,521,000 lbs. in Mar. 1949.

Stocks of soybean glue totaled 4,828,000 lbs. Mar. 31 compared with 4,659,000 lbs. Mar. 31, 1949.

● **STORAGE LOANS.** The Production and Marketing Administration of the U. S. Department of Agriculture has announced that loans to farmers to finance the construction or purchase of suitable farm storage facilities for grain and certain other storable crops including soybeans will be available through June 30, 1951.

Through this program, the Commodity Credit Corporation makes loans to farmers for the purchase or

construction of farm storage facilities in an amount not to exceed 85 percent of the cost of the structure. These loans, bearing interest at the rate of 4 percent per year, are payable in five annual installments, or earlier at the farmer's option.

● CRUSHINGS. Large supplies of soybeans and a good export and domestic demand for oil resulted in record crushings of soybeans this season. Crushings, as reported by the Census bureau, totalled 102.4 million bushels October 1949 through March 1950. This is 6 million bushels larger than during the same months last year and about 15 million more than the same months of 1947-48.

Exports of soybeans have been large, amounting to 8.3 million bushels for the first 6 months of the season but fall short of last year's record of 10.8 million bushels for the first 6 months.

In addition, 172 million pounds of soybean oil were exported October-March this season compared with 55 million the same months last season.

● FLAX SUPPORT. The Production and Marketing Administration of the U. S. Department of Agriculture has announced a support price of $2.82 a bushel, Minneapolis, Minn., basis, for No. 1 1950-crop flaxseed. This support price reflects an average support level of 60 percent of parity as of April 1, 1950, as announced for the 1950 crop on September 16, 1949. Support for the 1949 crop was $3.99 a bushel, Minneapolis basis.

● MARGARINE. Domestic vegetable oils in 1949 accounted for 98.4 percent of the total quantity of fats and oils used in margarine, and animal fats for 1.6 percent. Cottonseed and soybean oils comprised 98.3 percent compared with 96.2 percent in 1948 and 89.7 percent in the war period, when substantial quantities of coconut oil were used in margarine for export. Only 82,000 pounds of coconut oil were used in 1949, and no other foreign oils were used.

Margarine manufacture in 1949 took 20 percent of the total domestic disappearance of cottonseed, soybean, corn and peanut oils compared with 23 percent of a moderately smaller total in 1948 and 9 percent in prewar years. Margarine manufacture in 1949 accounted for 27 percent of the total domestic disappearance of cottonseed oil, as compared with 33 percent of a smaller total in 1948. Margarine accounted for 17 percent of the total domestic disappearance of soybean oil in both 1948 and 1949.

DOMESTIC VEGETABLE OILS: DOMESTIC DISAPPEARANCE AND USE IN MARGARINE, AVERAGE 1937-41, ANNUAL 1948 AND 1949

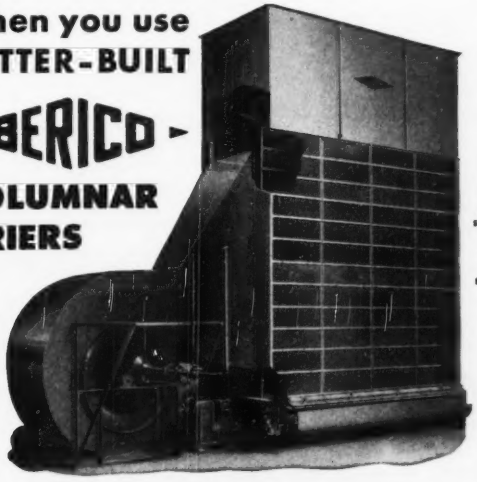
Item	Average 1937-41		1948		1949	
	Domestic disappearance	Use in margarine as percentage of domestic disappearance	Domestic disappearance	Use in margarine as percentage of domestic disappearance	Domestic disappearance	Use in margarine as percentage of domestic disappearance
	Mil. lb.	Percent	Mil. lb.	Percent	Mil. lb.	Percent
Corn oil	164	1	194	1	227	(*)
Cottonseed oil	1,552	9	1,368	33	1,597	27
Peanut oil	98	3	152	7	104	(*)
Soybean oil	400	15	1,470	17	1,539	17
Total	2,214	9	3,184	23	3,467	20

(*) Less than 0.05 percent.

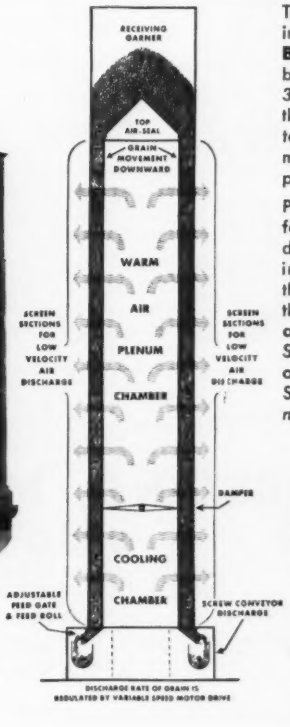
BETTER CROP RESULTS... BETTER PROFITS...

when you use BETTER-BUILT

- BERICO - COLUMNAR DRIERS



BERICO Drier, shown without cooler fan and fan enclosure. Special high carbon steel woven wire screens, forming 4 sides of dual, free-flowing columns, permit passage of tremendous quantities of low-temperature air through slowly moving mass of beans. Sizes for every capacity-need. Operate with Natural Gas, Oil, Butane or Propane.


RECEIVING GARNER
TOP AIR-SEAL
GRAIN MOVEMENT DOWNWARD
WARM AIR
PLENUM CHAMBER
SCREEN SECTIONS FOR LOW VELOCITY AIR DISCHARGE
SCREEN SECTIONS FOR LOW VELOCITY AIR DISCHARGE
DAMPER
COOLING CHAMBER
ADJUSTABLE FEED GATE & FEED ROLL
SCREW CONVEYOR DISCHARGE
DISCHARGE RATE OF GRAIN IS REGULATED BY VARIABLE SPEED MOTOR DRIVE

There's more profit for you in drying Soybeans with **BERICO** Columnar Driers because **BERICO** uses *2 to 3 times* more air at *low*, thermostatically controlled temperatures to approximate Nature's own drying process.

Precision-built, factory prefabricated; sturdy, heavy-duty construction; easy to install; **BERICO** features that mean *more savings* through reduced operating and maintenance costs. Send for recommendations of our Engineers . . . Data Sheets . . . Blueprints . . . *no charge, no obligation!*

H. M. SHANZER CO.

DRIERS · ELEVATORS CONVEYING MACHINERY

85 Bluxome Street
San Francisco 7, California

A STEP TO IMPROVE STRAW SPREADERS

TO THE EDITOR:

A reply to your letter of September 10, 1949, relative to unsatisfactory operation of straw spreaders as currently supplied with combines, this being particularly so in soybean harvest, was delayed considerably for the reason that prior to a reply we wished to discuss this feature with our own traveling field engineers who follow threshing operations during the entire harvest season.

From the information compiled, and this includes the attitude of our engineers as well as that of various combine owners and operators of our own and competitors' machines, it is the general opinion that straw spreaders have not been developed to a point of efficiency comparable to that of other features on machines with which the straw spreaders are supplied. It therefore is apparent that some study for improvement of the straw spreader is warranted and it is planned to include this as one of the projects in next season's engineering field test operations.—*L. Y. Andreas, International Harvester Co., farm implement division, Chicago, Ill.*

See editorial in May 1949 Soybean Digest on the subject of the need for an adequate straw spreader on combines operating on soybeans. —EDITOR.

Why Census Reports Are Late

TO THE EDITOR:

At a recent Institute meeting officials of the Bureau of Census were present to discuss the monthly releases showing production, consumption and disappearance of vegetable oils. Some of our members were somewhat critical of the Bureau because of the lapse of time in getting out its reports.

The officials present laid the matter right back in our laps. They said that they could not release the monthly figures until members of the industry sent in their reports. They stated that each month they had to make from 30 to 40 telephone calls in an effort to get the reports in.

From the remarks, it was indicated that some of our good friends in the soybean industry are among the offenders. We suggested that the matter be taken up with you with the view of expediting the reports.

It is hoped that the Census reports will be released not later than the 20th of each month. The Bureau seems to be trying to do a good job but is unable to do so due to late reporting by some members of our groups.

You may wish to bring this to the attention of soybean and soybean oil handlers.—*E. W. Brockenbrough, president Institute of Shortening and Edible Oils, Inc., Washington, D. C.*

"Recharge Crystal Ball"

TO THE EDITOR:

Having watched the soy market the last few weeks after having read your prognostications about soy prices to come am beginning to think you should get your crystal ball recharged.—*Edmund D. Morrison, Washington, Iowa.*

LETTERS

THE PRESS

Here's One Small Comfort

It was just one of those silly things governments do, making housewives knead their margarine before using, and hardly a momentous issue of state. But putting an end to one piece of foolishness is certainly worth a small cheer.

The ending of the discriminatory federal tax on colored margarine could offer a little parable, too. We can remember years back when a bill to repeal this tax was a hardy perennial in Congress.

. . . . . But when lunchtime comes we're going to take a piece of bread, spread it with margarine and a small bit of ham, and while we are munching we are going to meditate on the fact that sometimes—at least sometimes—foolishness does end.—*Wall Street Journal.*

A Deal with the Communists

Our government has as many hands as a Hindu goddess, and its actions at home and abroad often betray a lack of coordination that would send an individual to the doctor. Mr. Truman has accused the Chinese Communists of starving the Chinese to feed Russia. Meanwhile, officialdom in Tokyo and Washington cooked up a deal to feed Japan with Chinese food. CCC cotton will be bartered for Manchurian soybeans. Thus, the first deed in the official effort towards building a Japanese co-prosperity sphere in Asia is doing business with China's Communists.—*Barron's Weekly.*

327 So. La Salle St., Chicago 4, Ill. Phone: Harrison 7-5244

PHONE, WIRE, OR WRITE

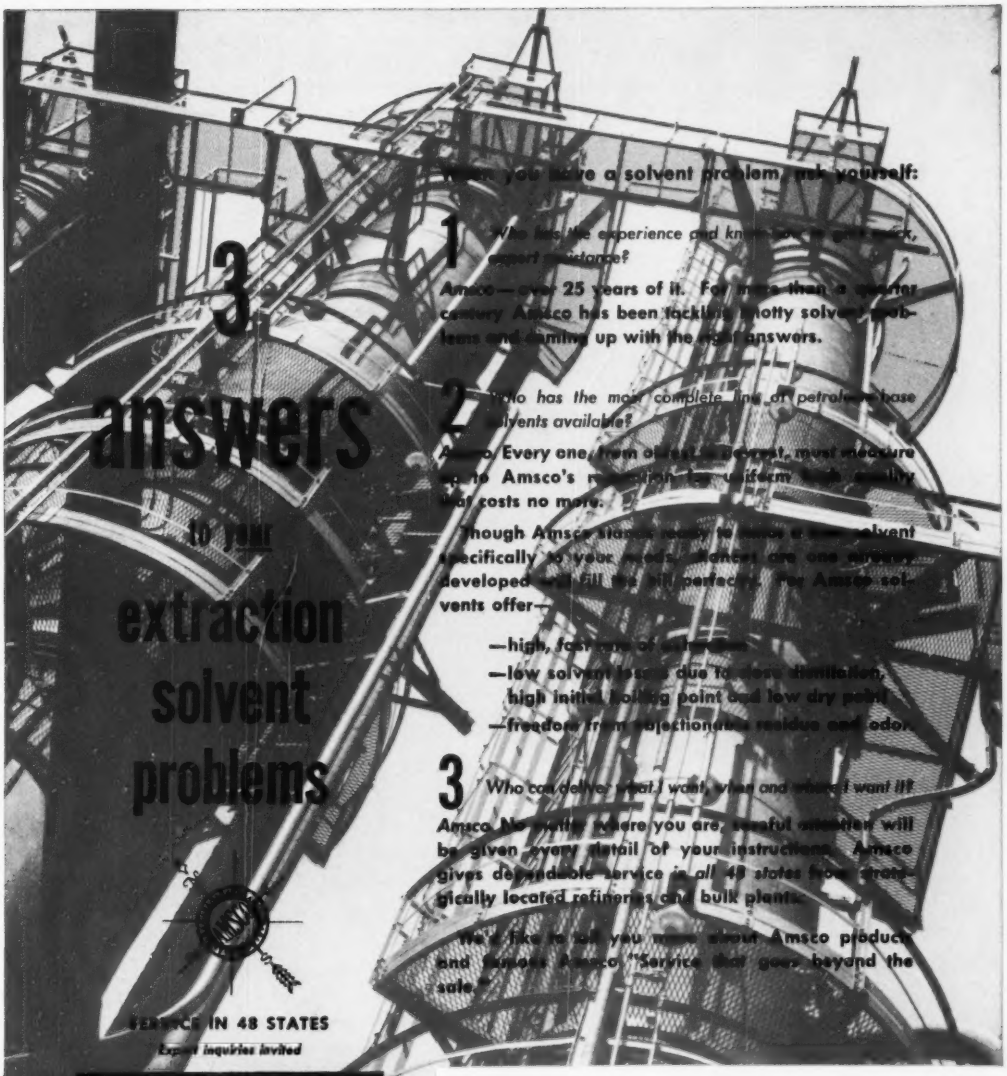
ROESLING, MONROE & CO.

BROKERS

CRUDE AND REFINED VEGETABLE OILS

CARL H. SMITH GEO. K. DAHLIN HUGH B. ELLSWORTH

Our clientele includes some of the finest names in the industry.

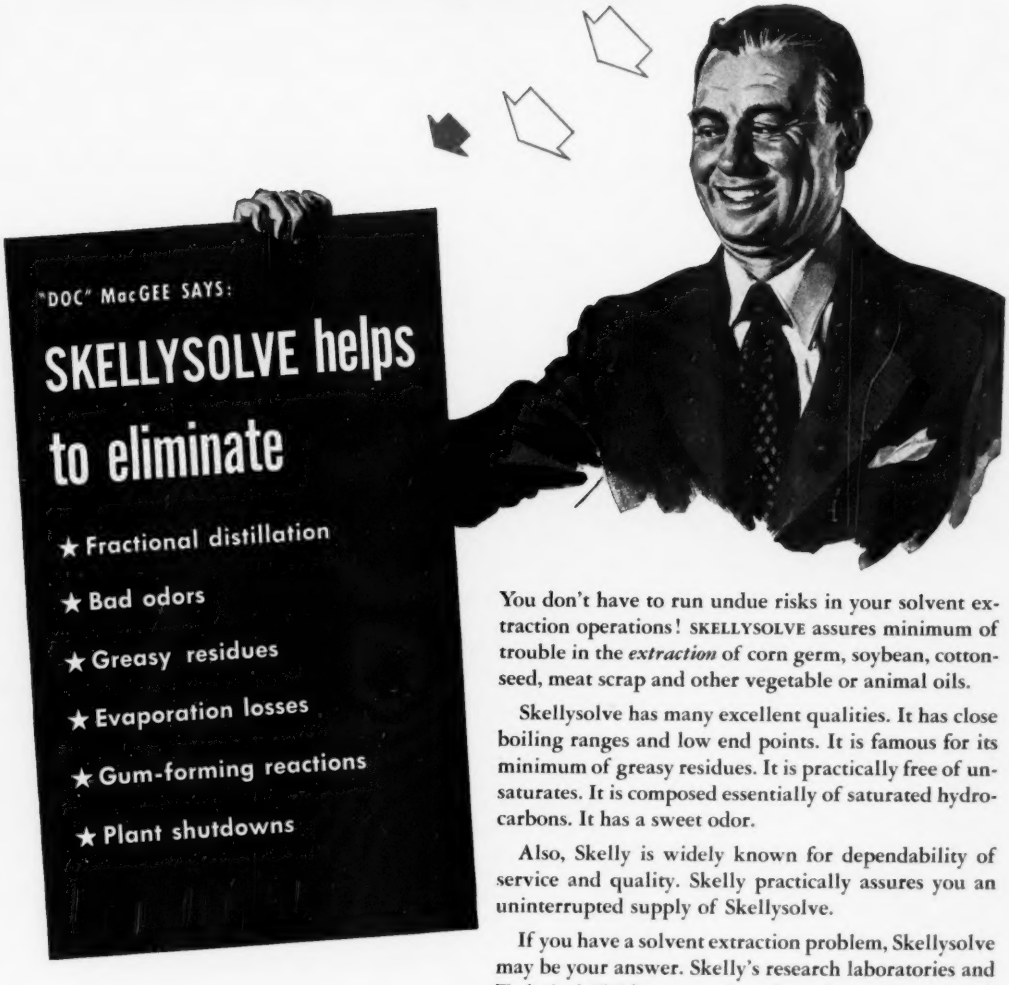

3
answers
to your
extraction
solvent
problems
When you have a solvent problem, ask yourself:
1
Who has the experience and knowledge to give quick, expert assistance?
Amsco—over 25 years of it. For more than a quarter century Amsco has been tackling knotty solvent problems and coming up with the right answers.
2
Who has the most complete line of petroleum-base solvents available?
Amsco. Every one, from oldest to newest, must measure up to Amsco's reputation for uniform high quality that costs no more.
Though Amsco stands ready to devise a new solvent specifically to your needs, chances are one already developed will fill the bill perfectly. For Amsco solvents offer—
—high, fast rate of extraction
—low solvent losses due to close distillation, high initial boiling point and low dry point
—freedom from objectionable residue and odor
3
Who can deliver what I want, when and where I want it?
Amsco. No matter where you are, careful attention will be given every detail of your instructions. Amsco gives dependable service in all 48 states from strategically located refineries and bulk plants.
We'd like to tell you more about Amsco products and Amsco "Service that goes beyond the sale."
SERVICE IN 48 STATES
Export inquiries invited
AMERICAN MINERAL SPIRITS COMPANY
CHICAGO, NEW YORK, LOS ANGELES
ATLANTA • BOSTON • BUFFALO • CARTERET, N. J.
CINCINNATI • CLEVELAND • CORPUS CHRISTI
DETROIT • FORT WAYNE • GRAND RAPIDS • HOUSTON
INDIANAPOLIS • KEARNY, N. J. • MILWAUKEE
NEW ORLEANS • PHILADELPHIA • PROVIDENCE
SAN FRANCISCO • ST. LOUIS • TOLEDO
TORONTO, CANADA • MONTREAL, CANADA

The most complete line of petroleum-base solvents available

Amsco products constitute the widest variety of petroleum solvents available. Every one of them, from the oldest to the newest, must measure up to the company's 25-year reputation—a reputation for uniform high quality, for prompt service, and for an eagerness to develop new products to meet industry's ever-changing demands.

UNIVERSITY MICROFILMS
313 N. FIRST ST.
ANN ARBOR, MICHIGAN

How to Reduce Solvent Risks in Extraction Operations...



You don't have to run undue risks in your solvent extraction operations! SKELLYSOLVE assures minimum of trouble in the *extraction* of corn germ, soybean, cottonseed, meat scrap and other vegetable or animal oils.

Skellysolve has many excellent qualities. It has close boiling ranges and low end points. It is famous for its minimum of greasy residues. It is practically free of unsaturates. It is composed essentially of saturated hydrocarbons. It has a sweet odor.

Also, Skelly is widely known for dependability of service and quality. Skelly practically assures you an uninterrupted supply of Skellysolve.

If you have a solvent extraction problem, Skellysolve may be your answer. Skelly's research laboratories and Technical Fieldmen stand ready to help you. Get full particulars now!

SKELLY

Skellysolve

SOLVENTS DIVISION, SKELLY OIL COMPANY, KANSAS CITY, MO.